



CITY PLANNING AND
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IDEAL FORMS FOR CITIES: AN HISTORICAL BIBLIOGRAPHY

Phyllis W. Ingersoll, graduate, Department of City and Regional
Planning, University of California, Berkeley

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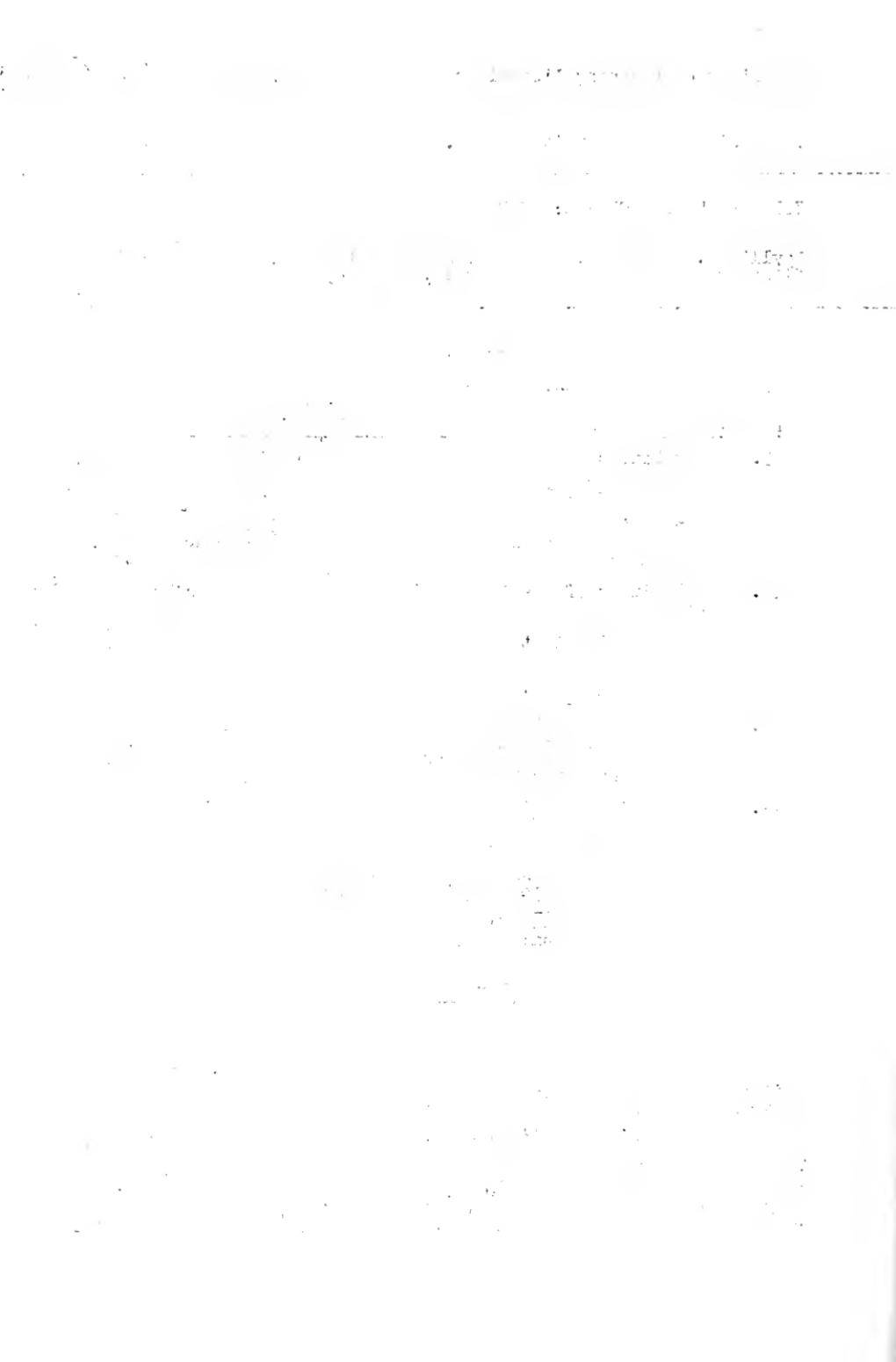
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INTRODUCTION

The aim of this bibliography is to select leading thinkers and writers who have proposed specific ideal urban forms, to organize their major works by historical period and, in Part III, by physical arrangement, and, finally, to list selected authors who have made significant comments upon their predecessors' or colleagues' work. The period from the Greek era through the Nineteenth Century has been well organized and described by many historians, but no author has yet described the broad outlines of city planning thought, activity and influence in the Twentieth Century, although there are several studies which cover specific countries. As a result of this



condition of scholarship this bibliography is more complete as it pertains to the Nineteenth Century and before. It is hoped, however, that it will prove interesting and suggestive in its coverage of ideal forms for cities in the first half of the Twentieth Century.

The ideal city as used herein is a projection of a search for a better society as described in physical form. It is often presented in literary or diagrammatic terms and is rarely constructed. The model city, by contrast, had theoretical rationale, but may have had no literary origin. It became such an important solution to real urban problems as to have been the first in a series of plans or actual cities.

ACKNOWLEDGMENTS

This bibliography is an expansion of my thesis, Concepts of Ideal Urban Form, submitted in partial satisfaction of the requirements for the degree of Master of City Planning, University of California, June, 1958 (175 leaves, including 41 plates). I am therefore greatly indebted to the members of my committee: Barclay G. Jones, Stephen W. Jacobs and Francis Violich.

Three unpublished works, noted in Part I, were of unusual assistance to me: Ideal Cities, by John W. Reps; A Critical Survey of Published Physical Planning Principles, by Thomas A. Reiner; and a bibliography, The Concept of the Ideal Urban Form, by Frederick G. Styles.

To Holway R. Jones, thanks for the encouragement and, above all, the opportunity to rework this material.

Format Notes

All items are numbered consecutively regardless of outline form to simplify the construction of a name index, pp. 51-53.

Numbers in curves following titles refer to the main entry under the author's name where the complete citation is given.

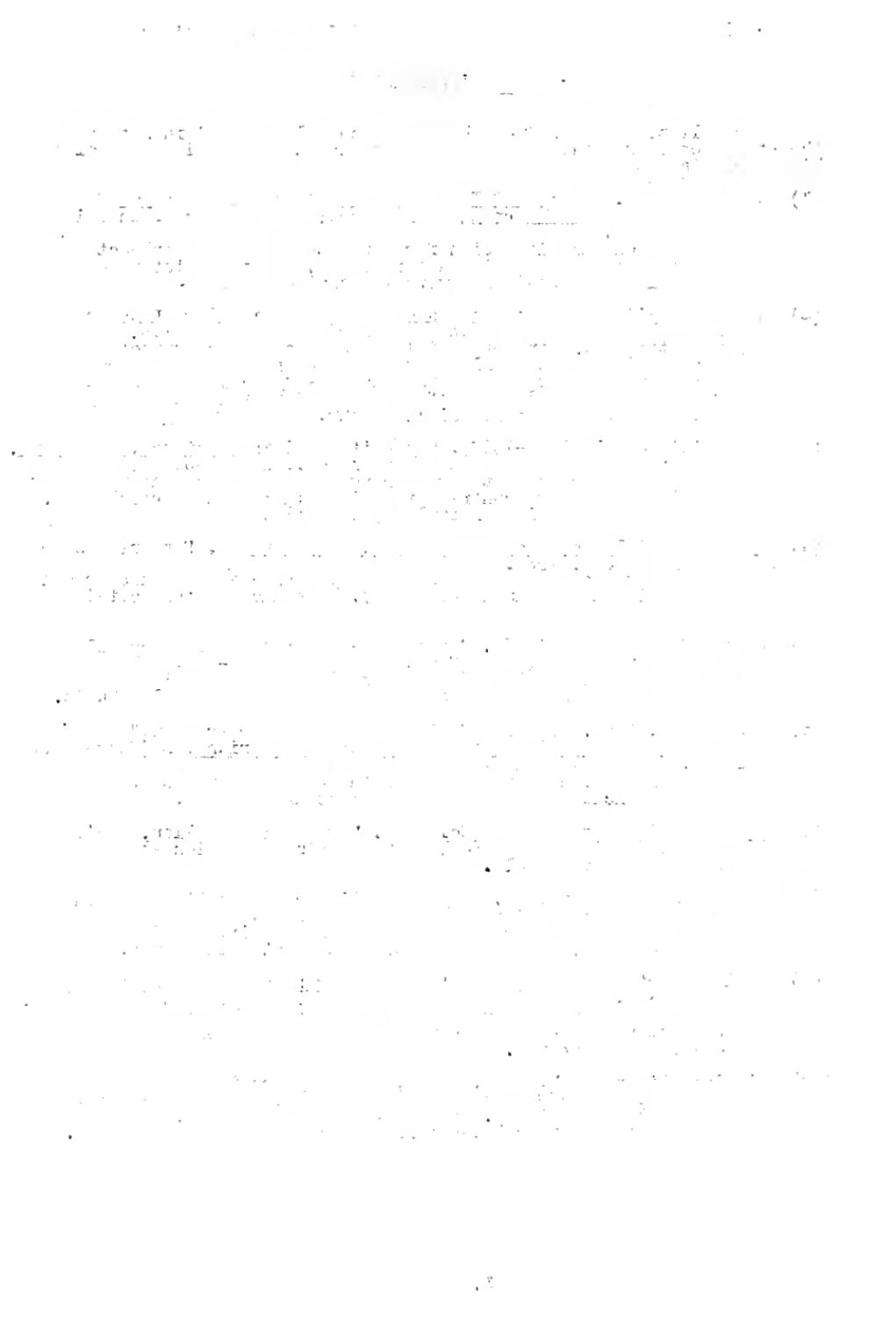
Where an author has had different editions of his work published these are listed first under sub-letters (a), (b), etc., followed by secondary works (commentaries).

A few entries are not complete bibliographically as not all books and periodicals were available to the author.

Part One: GENERAL REFERENCES

Works listed here include those particularly helpful in setting the stage for this bibliography, source books and materials of special bibliographic interest.

- (1) Adams, Thomas. Outline of Town and City Planning: a Review of Past Efforts and Modern Aims. New York: Russell Sage Foundation, 1935. 368 pp.
A good general discussion for students new to the subject. Approximately one-half the text is devoted to a history of city planning, beginning with the ancient world.
- (2) Ashworth, Williams. The Genesis of Modern British Town Planning. London: Routledge and Kegan Paul, 1954. 259 pp. (Series: International Library of Sociology and Social Reconstruction). A valuable and scholarly book, relating social and economic forces as well as various individuals who played important roles in the development of the British town planning movement. Comprehensive bibliography.
- (3) Aronovici, Carol (1881-1958). Community Building: Science, Technique, Art. Garden City, N.Y.: Doubleday and Co., 1956. 354 pp.
The author has brought a wide range of experience and reading from many countries to this primarily historical work. The bibliography is particularly valuable.
- (4) Avery Memorial Architectural Library. Catalogue of. Boston: Microphotography Co., 1958. 6 vols.
A major source book because of Avery's unparalleled historical collection at Columbia University. Reproduces actual catalog cards.
- (5) Bauer, Catherine (b.1905). "First Job: Control New City Sprawl," Architectural Forum, 105 (Sept., 1956), pp. 105-112.
Among other items this article presents a provocative discussion of ideal cities related to what is actually built.
- (6) Blumenfeld, Hans. "Theory of City Form, Past and Present," Journal of the Society of Architectural Historians, 8 (July-Dec., 1949), pp. 7-16. Illus.
Rare discussion of many general theoretical aspects of cities, including diagrams of various urban forms.
- (7) Encyclopedia of the Social Sciences. New York: MacMillan, 1931.
Useful preliminary source, although bibliographies are now over 25 years old.
- (8) Fisher, Robert Moore, ed. The Metropolis in Modern Life. Garden City, New York: Doubleday and Co., Inc. 1955. 401 p.
See pages 357-67 for discussions of ideal cities and the role they play by Sir George Clark and Catherine Bauer.
- (9) Gallion, Arthur B. The Urban Pattern City Planning and Design. New York: D. Van Nostrand Co. Inc., 1950. 446 p. Illus. and Plans.
A text for many city planning courses covering history and present practice. The chapter "The New Utopians" is particularly appropriate.
- (10) Giedion, Sigfried (b.1888). Space, Time and Architecture. Cambridge, Mass.: Harvard University Press, 1941; 1947; 1954.
3rd ed. enlarged. 778 p. Excellent illus. and plans.
Interesting where relevant historical material is presented.



(11) Goodman, Percival and Goodman, Paul. Communitas, Means of Livelihood and Ways of life. Chicago: University Press, 1947. 141 p. Illus. and plans.
Categorizes past utopias as; the green belt plans, the industrial plans and integrated plans, and includes much interesting material and original thinking. Then presents three new utopias, caricatures of various aspects of modern planning theory, with diagrams et al.

(12) Kimball, Theodora. Manual of Information on City Planning and Zoning. Cambridge, Mass.: Harvard University Press, 1920. 188 pp. Supplements were published in 1928 (edited by Kimball and Katherine McNamara, 103 pp.) and 1936 (edited by McNamara, 232 pp).
Extremely valuable source for the history of city planning in the United States, covering the period 1910-1935.

(13) Korn, Arthur. History Builds a Town. London: Lund Humphries, 1953. 109 pp. Illus. and plans.
Outstanding illustrations and good general history of cities with some ideal cities. Especially good on some modern utopias.

(14) Lang, S. "The Ideal City from Plato to Howard." Architectural Review, 112 (August, 1952), pp. 91-101. Illus. and plans.
A review of Renaissance material; some interesting ideas on the city as a symbol.

(15) Lavedan, Pierre (b. 1885). Histoire d'Urbanisme: Antiquité et Moyen Age. Vol. 1. Paris, Henri Laurens, 1926.

(16) ———. Histoire d'Urbanisme: Renaissance et Temps Modernes. Vol. 2. Paris, Henri Laurens, 1941. 504 pp.

(17) ———. Histoire d'Urbanisme: Epoque Contemporaine. Vol. 3. Paris: Henri Laurens, 1952. 446 pp.
The three Lavedan volumes are the single best source on the history of cities, actual and ideal. Unfortunately, an English translation does not yet exist. Illustrated.

(18) Maksimovic, Branko. Urbanizam. Belgrad: Izdavachko Preduzeto Gratevinske Kniga, 1957. 477 pp. Illus., plans and diagrams.
Written in cyrillic type, but contains an excellent collection of plates on all phases of city planning, including diagrams of ideal cities, especially of the sectorized type.

(19) Mumford, Lewis. The Story of Utopia. New York: Boni and Liveright, 1922. 315 pp.
Interesting discussion of the character and function of utopias, with past utopian writers used to reflect Mumford's own thinking.

(20) ———. The Culture of Cities. New York: Harcourt, Brace and Co., 1938. 586 pp. Illus.
An interpretive history of cities. Annotated bibliography, pp. 508-552.

(21) Purdon, C. B. The Garden City, A Study in the Development of a Modern Town. London: J. M. Dent and Sons, 1917. 350 pp. Illus.
An early description of the origins and theory of the Garden City movement.

(22) ———. The Building of Satellite Towns, a Contribution to the Study of Town Development and Regional Planning. London: J. M. Dent and Sons, 1925. Revised edition, 1949.
A more interpretative discussion of the origins and history of the Garden City movement, with description of the relationships of the various influences on Howard (Part one). The rest of the book describes the building of Letchworth and Welwyn.

the first time, and the first time I have seen it. (51)

1. The first step in the process of planning is to identify the problem or opportunity that needs to be addressed.

19. The following table gives the number of cases of smallpox reported in each State during the year 1851.

Proposed to the Board of Directors of the New York Stock Exchange.

10. *Chlorophytum comosum* (L.) Willd. (Fig. 10)

19. The following table gives the results of the experiments made by Mr. J. C. Goss on the growth of the plant under different conditions of temperature and light.

19. The following table shows the number of hours worked by each of the workers in the factory.

(23) Reiner, Thomas A. A Critical Survey of Published Physical Planning Principles. Unpublished Master's thesis. Massachusetts Institute of Technology, May, 1955. 104 leaves.
An extensive critical survey of literature published since 1895. Categorizes cities as massed, dispersed, poly-nucleated, and linear.

(24) Reps, John William. Ideal Cities. Unpublished Master's thesis. Cornell University, 1947. Illus.
A survey of ideal cities from Greek times to Howard.

(25) Stanislawski, Dan. "Origin and Spread of the Grid Pattern Town," Geographical Review, 36 (Jan., 1946), pp. 105-120.
Excellent article discussing the problems of the relationships between different geographical areas and historical periods.
Valuable bibliography.

(26) Stewart, Cecil. A Prospect of Cities. London: Longmans, Green and Co., 1952. 191 pp. Illus.
Brief and well written, but occasional errors in details.

(27) Sturgis, Russell. A Dictionary of Architecture and Building. New York: MacMillan, 1902. 5 vols.
Useful for biography and bibliography.

(28) Styles, Frederick G. The Concept of the Ideal Urban Form; A Selected Bibliography of Recent Theorists of Urban Form. Mimeo. Berkeley: University of California, 1957. 19 pp.
Revised edition, 1958.

(29) Tunnard, Christopher. The City of Man. New York: Charles Scribner's Sons, 1955. 424 pp.
Good discussion of utopias in general and coverage of the Renaissance and 19th. Century idealists.

(30) Wasmuths Lexikon der Baukunst. Berlin, Ernst Wasmuth A.G., 1929. 1937. 5 vols. Profusely illustrated.
Contains information on terms, biography and places.

(31) Zevi, Bruno. Storia dell'architettura moderna. Torino, Giulio Einaudo, 1953. 795 pp. Illus. and plans
Especially valuable for the continental idealists of the 20th. Century, providing information and discussion of relationships unavailable elsewhere.



Part Two: SIXTH CENTURY GREECE THROUGH THE VICTORIAN ERAI. GREEK CITIES: MODEL AND IDEAL

The concept of the city as a political, socio-economic and physical unit was highly developed in Greek administrative theory. The two philosophers, Plato and Aristotle, however, were concerned with social rather than physical relationships in their descriptions of ideal cities. Previously, during the Hellenic period (6th.-4th. Century B.C.) the model type, consisting of grid-iron plan with central agora was developed (presumably by Hippodamus) and was used in the building of several colonial cities. Later, during the Hellenistic period (4th.-1st. Century B.C.) this same model plan was used by Alexander the Great (337-323 B.C.) in the layout of great numbers of cities which he founded throughout his empire.

A. The Hippodamian Model

These works dealing with the history and theory of the Hippodamian type plan represent at least three periods of Greek scholarship: the very influential early German works (Erdmann, 1883; Herman, 1841; Mackowsky, 1909), the high point of comprehensive studies (Haverfield in England, 1913; Gerkan in Germany, 1924; Lavedan in France, 1926), and the best in recent scholarship (Wycherley in England, 1951).

(32) Boëthius, Carl Axel (b.1889). "Roman and Greek Town Architecture," Göteborgs Högskolas Arsskrift. Göteborg, Elandersboktr., 1948. Vol. 3. 52 pp. Illus. and plans.
English text. Discusses problems of the relation between model Greek and Roman town plans and also architectural urban form. Scholarly notes and bibliographic discussion.

(33) Erdmann, Martin (b.1858). Zur Kunde der Hellenistischen Staedtegründungen. Strassburg, Joh. Heinr. Ed. Heitz, Buchdrucker des Protestantischen Gymnasiums. 1883. (Series: Programm Protestant. Gymnasium zu Strassburg). 30 pp.
Early study of plans using archaeological data. Now superseded by von Gerkan (36).

(34) ——. "Hippodamos von Milet und die symmetrische Staedtebaukunst der Griechen," Philologus, Zeitschrift für das Klassische Alterthum (Leipzig; Goettingen), 42 (1884), pp. 195-227.
German commentary with sources of all references to Hippodamus quoted in Greek.

(35) Gardner, Percy (1846-1937). "The Planning of Hellenistic Cities," Transactions, Town Planning Conference, R.I.B.A. London: 1911. pp. 111-112.
Short article by a prolific writer on Greek art and architecture.

(36) Gerkan, Armin von (b.1884). Griechische Staedteanlagen: Untersuchungen zur Entwicklung des Staedtbaues im Altertum. Berlin and Leipzig, W. de Gruyter and Co., 1924. 175 pp. Excellent illus. and plans.
"The man to whom the study of this subject owes more than any other." (Wycherley, How the Greeks Built Cities, p. ix). A major reference work which correlates both archaeological data and written sources. Bibliographical footnotes. For Hippodamian model, see pp. 28-123.

(37) Haverfield, Francis John (1860-1919). Ancient Town Planning. Oxford: Clarendon Press, 1913. 152 pp. Illus. and plans.
"Although out of date in detail, the most useful general account." (Ward-Perkins, Town Planning Review, 26:153). Bibliographical footnotes. For Hippodamian model, see pp. 19-57.

(38) Hermann, Karl Friedrich (1804-1855). de Hippodamo Milesio.
Marburg, 1841.

(39) Ivanka, Endre. Die Aristotelische Politik und die Staedtegru-
endungen Alexanders des Grossen. Budapest, 1938. 62 pp.
Describes the relation between the teacher, Aristotle, and the
pupil, Alexander the Great, and his founding of cities. See
pp. 1-20.

(40) Jones, Arnold Hugh Martin (b.1904). The Greek City from Alexander
to Justinian. Oxford: Clarendon Press, 1940. 393 pp.
Describes the model city in the socio-political scene, including
administration, education, etc. For reference to physical
plan, see p. 214.

(41) Lavedan, Histoire de l'Urbanisme, vol. 1 (15).

(42) Mackowsky, Hans (1871-1938). "Die Geschichtliche Entwicklung des
Stadtplanes," Der Staedtebau (Berlin, Wasmuth), 1908, pp. 29-30,
45-47, 73-77. Illus. and plans in sections with plates.
Early description of the development of Greek plans. (See
pp. 45-47).

(43) Martienssen, Rex Distin (1902-1942). "Greek Cities," The South
African Architectural Record, 26 (Jan., 1941), entire issue.
Excellent illus. and maps.
Historical, physical and economic aspects presented in handsome
and scholarly form. Bibliography, pp. 56-58.

(44) Martin, Roland. L'Urbanisme dans la Grece Antigue. Paris, A. & J.
Picard, 1956. 301 pp. illus. and plans.
Discusses two and three dimensional aspects of Greek cities.
Footnotes.

(45) Robertson, Donald S. (b.1885). Handbook of Greek and Roman Archi-
ture. Cambridge, University Press, 1929. 2nd. edition, 1945
and 1954. 406 pp.
A brief and thorough account of Greek and Roman plans and the
relation between them. (See pp. 186-191).

(46) Stanislawski, "Origin and Spread of the Grid Pattern Town,"
Geographical Review, vol. 36. (25).

(47) Wycherley, R. E. How the Greeks Built Cities. London: Macmillan and
Co., 1949. 227 pp. Illus. and plans.
Deals with the plans and other aspects of cities in the
Hellenic period. Annotated bibliography on the best sources,
pp. 210-222. For Hippodamian model, see pp. 1-35.

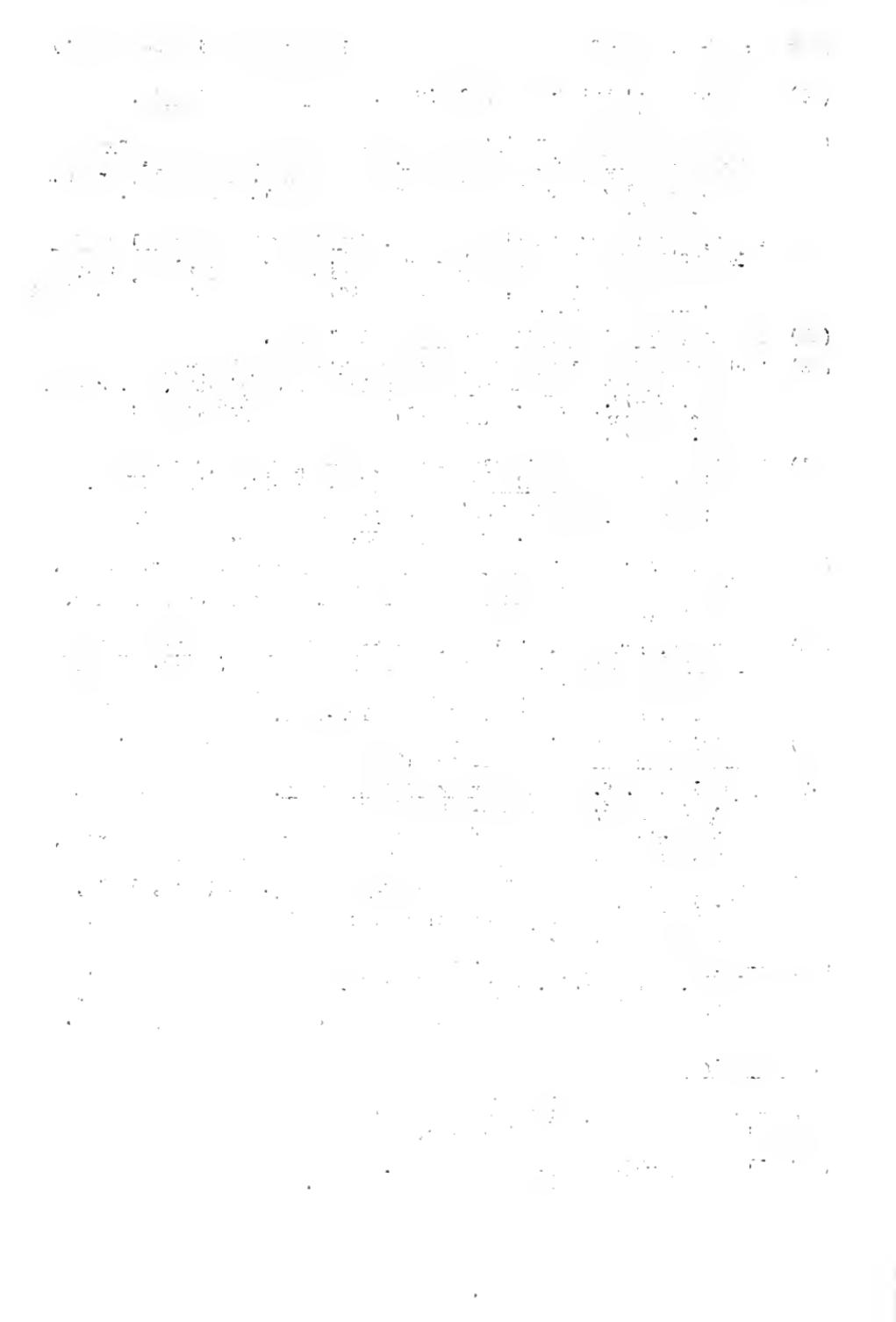
(48) ——. "Hellenic Cities," Town Planning Review, 22 (July, 1951),
pp. 103-121. Illus. and plans.
Detailed account of several cities in the Hellenic period.
Bibliography, p. 121.

(49) ——. "Hellenistic Cities," Town Planning Review, 22 (October,
1951), pp. 177-205. Illus. and plans.
Discussion of general characteristics of Miletus, Priene and
other cities of the Hippodamian type. Bibliography, p. 205.

B. Ideal Greek Cities

A few passages from the writings of Plato and Aristotle, and
commentaries upon them, will demonstrate the general way they described
physical plans for their ideal cities.

(50) Plato (427-347 B.C.). The Republic.
Negligible reference to physical form.



(51) ----. The Laws, IV:704-5; V:745; and especially VI:778-9; VIII:848.

- (a) Gerkan, Griechische Staedteanlagen (36), p. 62.
- (b) Stewart, A Prospect of Cities (26), pp. 10-13.
- (c) "Plato's Republic," Garden City (London), 1 (Feb., 1906), pp. 16-18.

(52) Aristotle (384-322 B.C.). Politics, II:6-8; VII:4-12.

- (a) Gerkan, Griechische Staedteanlagen (36), p. 62.
- (b) Ivanka, Die Aristotelische ... (39), pp. 1-20.
- (c) Stewart, A Prospect of Cities (26), pp. 13-20.

II. ROMAN CITIES: MODEL AND IDEAL

During the period of Roman expansion, 200 B.C.-400 A.D., the Greek type of grid-iron pattern with central forum was used for many new cities, but it had been regularized by the addition of defensive walls with gates at their centers forming a square fortification. No contemporary theories or laws have been found which call for this type of plan, although there is one description by Polybius (205-125 B.C.). The contemporary theorist, Vitruvius, did not clearly promulgate this theory and his influence on his own time was negligible compared with the great influence of his book in the Renaissance.

A. The Model Roman City

This section contains the contemporary description of the model Roman city by Polybius, three important historians (Haverfield in England, 1913; Gerkan in Germany, 1924; Lavedan in France, 1926) and the best of modern research (Ward-Perkins in England, 1955).

(53) Boethius, "Roman and Greek Town Architecture," Göteborgs Högskolas Årsskrift, (32).

(54) Gerkan, Griechische Staedteanlagen. (36), pp. 123-169.

(55) Haverfield, Ancient Town Planning. (37), pp. 75-137.

(56) Lavedan, Histoire de l'Urbanisme (15), vol. 1

(57) Mackowsky, "Die Geschichtliche Entwicklung des Stadtplanes," Der Städtebau, (42), pp. 73-77.

(58) McKendrick, Paul (b.1912). "Roman Town Planning," Archaeology, 9 (Summer, 1956), pp. 126-133. Illus., plans and air photos. A popular summary of recent research in Roman town planning. No bibliography or footnotes.

(59) Polybius (205-125? B.C.). The Histories. Edited by E. S. Shuckburgh. London and New York: Macmillan and Co., 1889. 2 vols. Diagram opposite p. 1. Discussion of the typical Roman plan, Book VI, sect. 27-41.

(60) Robertson, Handbook of Greek and Roman Architecture. (45), pp. 190-194.

(61) Stanislawski, "Origin and Spread of the Grid Pattern Town," Geographical Review, (25).

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CLIMATE AND THE EARTH'S ENERGY BALANCE: A PERSPECTIVE
John T. Kiehl and Richard W. Reynolds

Department of Earth Sciences, University of Colorado, Boulder,
Colorado 80309, and Department of Earth Sciences, University of
Illinois at Urbana-Champaign, Urbana, Illinois 61801

and

CLIMATE AND THE EARTH'S ENERGY BALANCE: A PERSPECTIVE

John T. Kiehl¹ and Richard W. Reynolds²
¹Department of Earth Sciences, University of Colorado, Boulder,
Colorado 80309, and Department of Earth Sciences, University of
Illinois at Urbana-Champaign, Urbana, Illinois 61801
²Department of Earth Sciences, University of Colorado, Boulder,
Colorado 80309

ABSTRACT. This paper presents a perspective on the Earth's energy balance. It is divided into two parts. The first part is a review of the basic concepts of the Earth's energy balance, the role of the atmosphere in maintaining the balance, and the role of the atmosphere in determining the Earth's climate. The second part is a discussion of the Earth's energy balance in the context of the Earth's climate.

KEY WORDS: energy balance, Earth's energy balance, Earth's climate, atmospheric circulation, atmospheric science, climate science.

1. Introduction—The Earth's energy balance is a fundamental concept in atmospheric science. It is a concept that is used to describe the way in which the Earth's atmosphere maintains the balance between the incoming solar radiation and the outgoing longwave radiation.

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The Earth's energy balance is a concept that is used to describe the way in which the Earth's atmosphere maintains the balance between the incoming solar radiation and the outgoing longwave radiation.

(62) Ward-Perkins, J. B. (b. 1912). "Early Roman Towns in Italy," Town Planning Review, 26 (Oct., 1955), pp. 124-154. Plans.
Excellent discussion of the origin and use of Roman model plans. Bibliography, pp. 153-154.

B. Vitruvius' Ideal Roman City

(63) Vitruvius, Pollio (1st. Cent. B.C.). Ten Books on Architecture.
"The work was highly esteemed during the middle ages and was frequently transcribed. The manuscript of St. John's College, Oxford, was made as late as 1316. A manuscript at Avignon was carried to Spain in the 15th. Century. The editio princeps was published by Johannes Sulpitius Verulanus, c. 1486, and again c. 1507-1513, 1525-1530, 1536, etc." (Sturgis, R. A. Dictionary of Architecture and Building, N.Y.: Macmillan, 1902, p. 1101). "Vitruvius seems to have given illustrations at the end of his several books. Of these none have come down except perhaps the diagram of the winds in Book I." (Granger, p. xxvii). Two scholarly editions with commentary and notes are listed in "a" and "b" below:

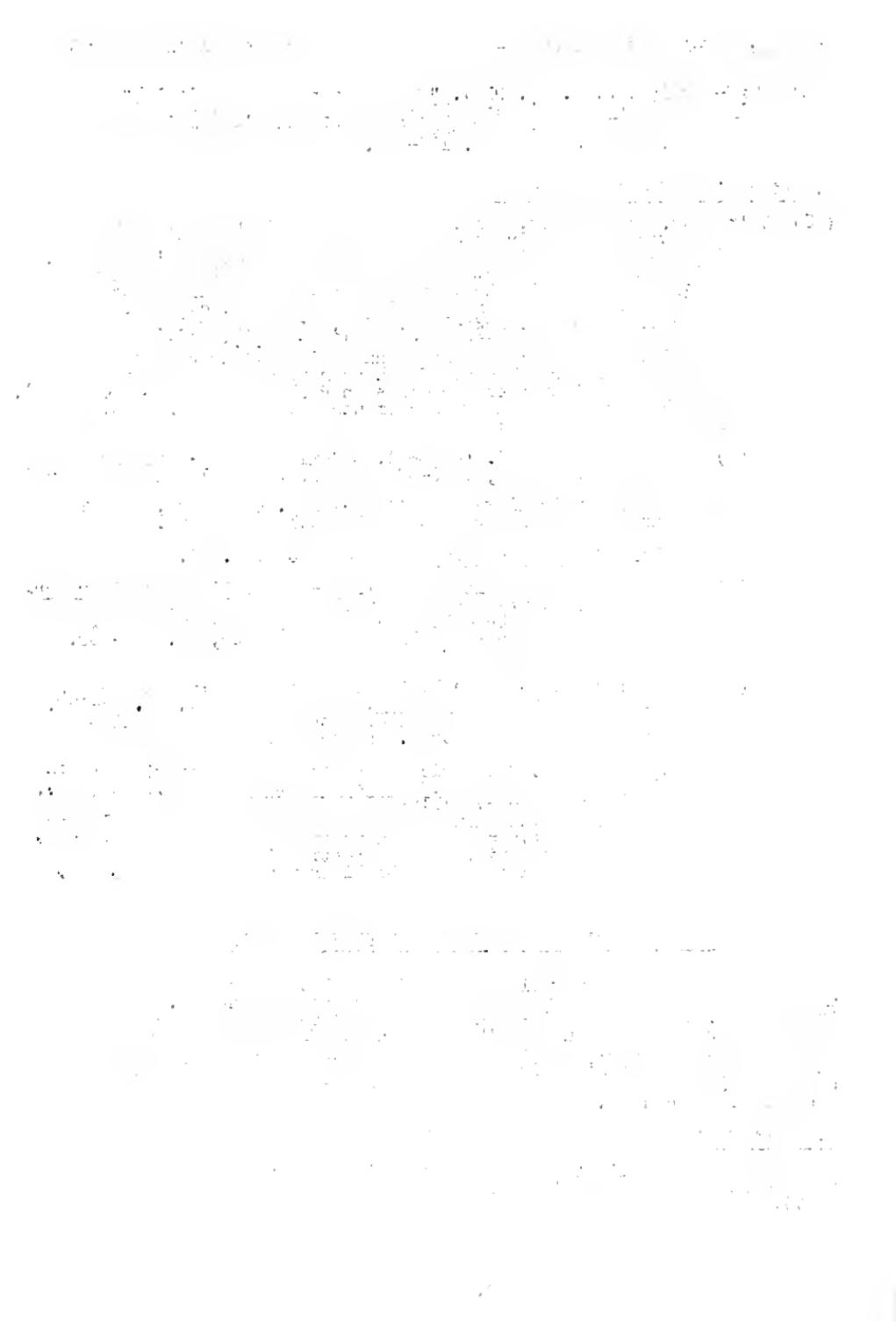
- (a) Granger, Frank, ed. (b. 1864). Cambridge, Mass: Harvard University Press, 1955-56. 2 vols. (Loeb Classical Library)
- (b) Morgan, Morris Hicky, ed. (1859-1910). Cambridge, Mass.: Harvard University Press, 1914. 331 pp. Illus.
- (c) Gerkan, Griechische Staedteanlagen (36), p. 64.
- (d) Schlosser, Julius Ritter von (1866-1938). Die Kunsliteratur. Wien, Kunstverlag Anton Schroll and Co., 1924.
Also Italian translation: In Letteratura Artistica. Firenze, La Nuova Italia, 1935 and 1956, pp. 251-259.
Source material and bibliography.
- (e) Stanislawski, Dan. "Early Spanish Town Planning in the New World," Geographical Review, 38 (Jan., 1947), pp. 94-105.
Discusses the influence of Vitruvius on the Spanish towns in the New World. Footnotes.
- (f) Rosenau, Helen. "Historical Aspects of the Vitruvian Tradition in Town Planning," Journal of the R.I.B.A., 62 (Oct., 1955), pp. 481-487. Illus.
The Vitruvian plan and other elements of the ideal city as they influenced designers from Filarete to Karlsruhe. Includes a variety of interesting ideas on diverse sources of influence. Bibliography and notes, p. 487.

III. MODEL CITIES OF THE LATE MEDIEVAL PERIOD

Among the many towns which grew and were founded in the later medieval period, at least two model types are now recognized. The Bastide type, based on a grid-iron pattern with central market-place and near-by church, were founded both in southwest France and north England between 1150 and 1350. A second group of towns, founded between 1200 and 1300 by the Teutonic knights in eastern Germany, the Kolonialstaedte, were based on several models, depending upon the purpose and founder of the colony.

A. Bastide Towns

One of the earliest studies (Tout, 1917) remains the foundation for two recent and more detailed accounts (Dickinson, 1938, and Shillaber, 1947).



(64) Adams, Outline of Town and City Planning (1), pp. 86-88, 91-94.

(65) Dickinson, Robert Eric (b.1905). "Le Developpement et la Distribution de Plan Medieval en Echiquier dans le Sud de la France et l'est de l'Allemagne," La Vie Urbaine, 47 (1938), pp. 271-296. Maps, plans and diagrams.
Discussion of the grid-iron plan in southern France and Eastern Germany. Bibliography, pp. 295-296.

(66) ——. The West European City, a Geographical Interpretation. London: Routledge and Kegan Paul Ltd., 1951. 550 pp. (series: International Library of Sociology and Social Reconstruction). Excellent illus. and maps.
Attempts to be comprehensive, but the work is confused by a disorganized wealth of details. Little on the Bastide. Extensive bibliography, see p. 353.

(67) Horns, Frederick R. (b.1876). Town Building in History. London: George G. Harrap and Co., 1956. 445 pp. Excellent illus.
Summary of influences and extent of Bastide towns, pp. 122-127.

(68) Lavedan, Histoire de l'Urbanisme (15), vol. 1.

(69) Parker, John Henry (1806-1884). Some Account of Domestic Architecture in England from Edward I to Richard II. Oxford, 1853. 252 pp.
Illus. and plans.
Early account by a prolific writer on history of Greece and Rome. (See vol. 3 chapter 5).

(70) Shillaber, Caroline. "Edward I, Builder of Towns," Speculum, 22 (1947), pp. 296-309. Maps and plans.
Detailed and interesting account of plans and other aspects of the building of Bastide towns, using quotes from contemporary sources. Footnotes.

(71) Stanislawski, "Origin and Spread of the Grid Pattern Town," Geographical Review (25).

(72) Stewart, A Prospect of Cities (26).

(73) Tout, Thomas Frederick (1855-1929). "Medieval Town Planning"
(a) The Bulletin of the John Rylands Library, 4 (April-August, 1917), Manchester University Press.
(b) Town Planning Review, 8 (April, 1919).
(c) Medieval Town Planning. Manchester University Press, 1925 and 1934. 35 pp.
Short but comprehensive discussion of the Bastide plan and its geographical extent. Bibliography.

B. The Kolonialstadt

Unfortunately a clear, comprehensive outline of these types is unavailable in English. Early German scholarship in this field (Koetzsche, 1912, and Kloepfel, 1926) was turned to political use in 1937 (Koetzsche).

(74) Dickinson, Robert Eric. "The Development and Distribution of the Medieval German Town," Geography, 27 (March and June, 1942), pp. 47-53.
The second article covers geographical extent of the towns but contains no description of the model types. Bibliography.

(75) ——. The West European City (66). Best available coverage of subject in English. Bibliography, pp. 554-564, is excellent. (See pp. 301-416).

2. $\frac{1}{2} \times \frac{1}{2} = \frac{1}{4}$
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(76) Kloeppel, Otto (b.1873). Siedlung und Stadtplanung im deutschen Osten. Berlin: Guido Hackeborn A.G., 1926. 45 pp. Plans. Clear presentation of typical plans and their examples, but not much emphasis on origin or geographical extent. No footnotes or bibliography. (See p. 23 for three types).

(77) Koetzschke, Rudolf (b. 1867). Quellen zur Geschichte der ostdeutschen Kolonisation im 12ten bis 14ten Jahrhundret. Leipzig: B.G. Teubner, 1912. 142 pp. German commentary on Latin texts of the sources of the history of the colonization of eastern Germany. (See pp. 71-81).

(78) ——, and W. Ebert. Geschichte der ostdeutschen Kolonisation. Leipzig: Bibliographisches Institut, 1937. 251 pp. Maps and plans. A political tract showing the relation of western with "eastern"Germany! Bibliography, pp. 239-251. (See p. 200).

(79) Mackowsky, "Die Geschichtliche Entwicklung des Städtebaus," Der Städtebau (42). Early description of the cities of the German east, p. 77.

IV. CITIES OF THE RENAISSANCE: MODEL AND IDEAL

Although the ideal city of the Renaissance in Europe and in the New World is not identical in every manifestation, its characteristics are easily recognizable throughout the period of its promulgation (1462-1625) and in later individual examples. The plan is symmetrical and centrally focused around an open space or an important building, whether the street pattern is grid-iron or radio-concentric. In most cases the exterior walls of the city form a complex geometrical pattern such as an octagon or a star, drawn in calculated relation to the central focus and the street pattern.

Five considerations of varying importance among the theorists seemed to be satisfied by this type of city plan: (1) revival of concern for social and political utopias, (2) new self-consciousness about three dimensional design related to the contemporary studies of perspective, (3) concern for the symbolic meaning of centrality, (4) delight in geometrical patterns and relationships, (5) defense needs caused by the introduction of cannon which came into Italy in 1494 with conquering French armies, and (6) defense and control of extensive new lands dominated by a few key cities. Large numbers of fortress cities of this exact model were built in every part of continental Europe, North Africa and South America from 1545 to 1698. Later, shed of its heavy walls, the symmetric and central plan had great influence on the building of new palaces and the rebuilding of cities.

A. General References

German scholarship from 1910 to 1930, represented in summary by Muentner (1929) and by Lavedan (1941), has made the greatest contribution to this subject.

(80) Bardet, Gaston (b.1907). Naissance et Méconnaissance de l'Urbanisme. Paris: SABRI, 1951. 423 pp. See pp. 17-65.

(81) Brinckmann, Albert (b.1877). "Entwicklung des Staedtebau Ideals seit der Renaissance." Transactions of the Town Planning Conference of R.I.B.A., 1910, pp. 146-166. Illus. German text with shortened English translation. Also published in Deutsche Bauzeitung, January-February, 1910.

(82) De la Croix, Horst Max Albert. Problems in 16th Century Italian Urbanism: The Radial Plan from Sforzinda to Palmanova. Unpublished Ph.D. dissertation, University of California, 1958. 256 leaves. Maps and plans. Emphasizes the importance of military considerations in the "ideal" urban form. A comprehensive and scholarly work, including many quotes from contemporary texts. Also an invaluable section on the development of Renaissance historiography. Excellent bibliography.



(83) Dickinson, The West European City (66).
In this part the author sets the theorists in their historical setting. (See chapter 18, pp. 415-445).

(84) Enciclopedia Italiana. Milan and Rome: Bestetti and Trumminelli, 1931-1939.
Brief outline: See under "Citta," pp. 489-491, with bibliography, p. 492. Excellent illustrations.

(85) Giedion, Space, Time and Architecture (10), pp. 41-55.

(86) Jordan, R. F., and Stuart. "Cities of the Grand Renaissance," Journal of the Town Planning Institute, 33 (March, 1947)

(87) Lavedan, Histoire de l'Urbanisme (16), vol. 2, pp. 9-34, 72-92.

(88) Maul, A. "Die Idealstadt," Der Staedtebau, 24 (1929), pp. 313-314. Illus. and plans.

(89) Muenter, Georg. Idealstaedte: Ihre Geschichte vom 15-17 Jahrhundert.
(a) Dissertation, Danzig Technische Hochschule, 1929.
(b) Der Staedtebau, 24 (1929), pp. 249-56, 317-40.
(c) Berlin: Henschelverlag, 1957. 104 pp.
German text. Most comprehensive and complete study available. Footnotes.

(90) Parsons, William Barclay (1859-1932). Engineers and Engineering in the Renaissance. Baltimore: Williams and Wilkins Co., 1939. 661 pp. Illus. and maps.
Discusses many aspects of civil and structural engineering without emphasizing the military. Bibliography, pp. 619-623, includes many Renaissance treatises and their location.

(91) Piccinato, L. "Origini dello Schemo Urbano Circolare nel Medioevo," Urbanistica, 16 (1947), pp. 124-136.

(92) Rasmussen, Steen Eiler (b.1898). Towns and Buildings. Cambridge, Mass.: Harvard University Press, 1951. 205 pp. Excellent illus. and plans.
The best presentation available in English; leans heavily on Muenter (89). See pp. 20-27.

(93) Rosenau, Helen, "Historical Aspects of the Vitruvian Tradition in Town Planning," Journal of the R.I.B.A. (63-f).

(94) Schlosser, Die Kunsliteratur (63-d).

(95) Stewart, A Prospect of Cities (26).

(96) Wittkower, Rudolf (b.1901). Architectural Principles in an Age of Humanism. London: Alec Tiranti, Ltd., 1950. 144 pp. Illus.
Does not discuss city plans as such, but many of the architectural principles are appropriate.

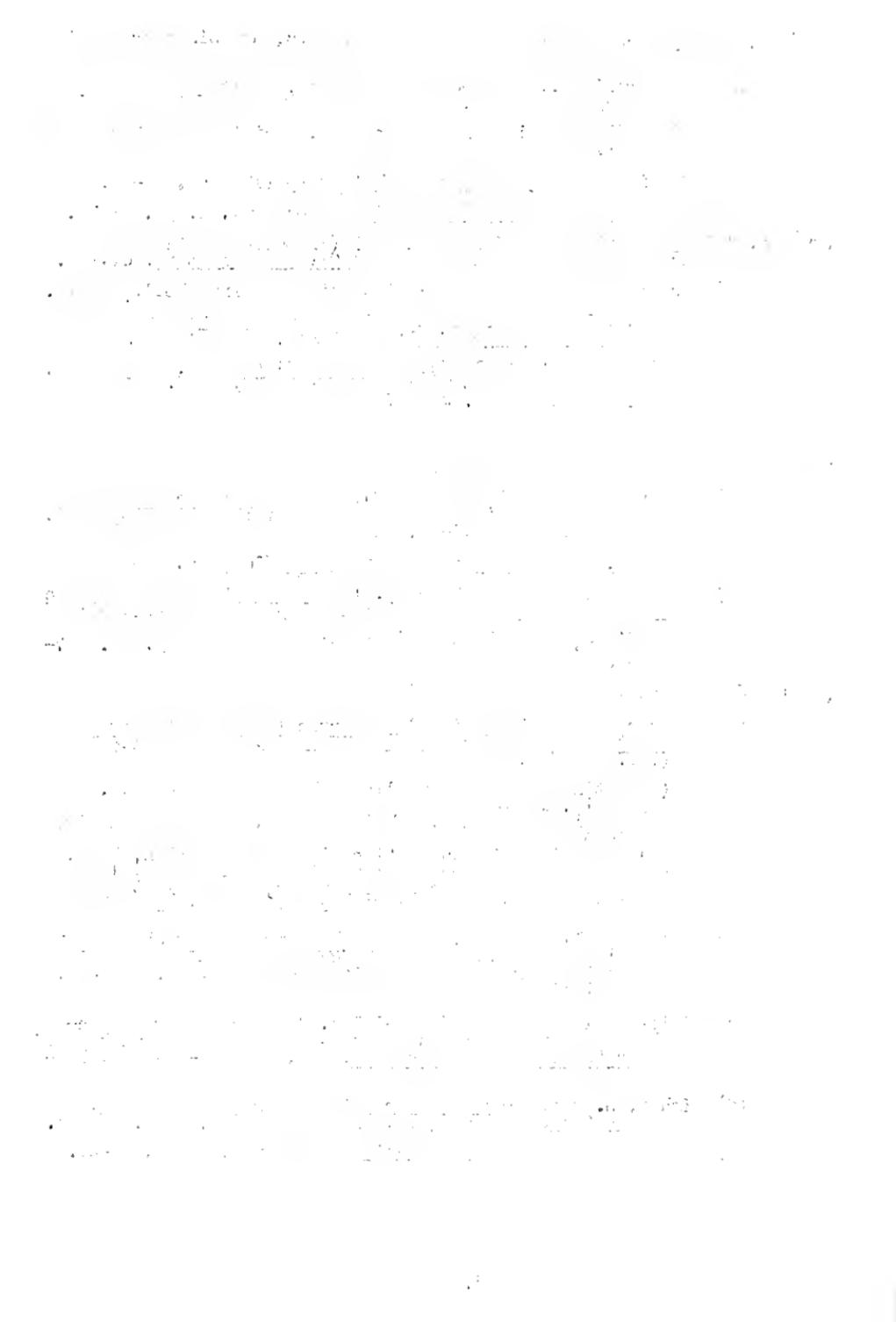
B. Treatises on the Central Model City

Arranged by date. This is an extensive, but not complete list of Renaissance treatises. It includes the more available and also some rare manuscripts with library location noted in some instances. Only a few authors have been chosen for more intensive bibliographic study.

(97) 1st. Cent. B.C. VITRUVIUS, Ten Books on Architecture (63).

(98) c. 1460-64 A.D. FILARETE (Antonio di Pietro Averlino, 1400-1469). Trattato d'Architettura, 1460-64.
(a) Oettingen, W. von. Quellschriften für Kunstgeschichte und Kunsttechnik, Vienna, C. Graeser, 1896. vol. 3. German text. (Lib. of Cong.)

- (b) Lazzaroni, M., and Munoz. A Filarete, Scultore e Architetto de Secolo XV. Rome, 1908.
- (c) Microfilm of original Italian text, Society of Architectural Historians.
- (d) Giedion, Space, Time and Architecture (10), pp. 45-47.
- (e) Lavedan, Histoire de l'Urbanisme (16), vol. 2, pp. 12-14.
- (99) c. 1480 FRANCESCO DI GIORGIO MARTINI (FRANCESCO DI GIORGIO, 1439-1502). Trattato di Architettura Civile e Militare, c.1480.
 - (a) Promis, Carlo, ed. Turin: Tip. Chirio e Mina, 1841. 2 vols.
 - (b) Fontana, Paolo, "F. G. Martini," Résumés de Communications, Congrès de Histoire de l'Art, Berne, 1931. 102 pp.
 - (c) Papini, Roberto (b.1883), Francesco di Giorgio, Architetto. Florence: Electa Aditrice, vol. 1 and 2, 1948. Bibliography, pp. 267-275
- (100) LEONARDO DA VINCI (1452-1519)
 - (a) Richter, Jean Paul (1847-1937). The Literary Works of Leonardo da Vinci. London: Oxford University Press, 1939. See vol. 2, pp. 21-22, 249.
 - (b) Giedion, Space, Time and Architecture (10), pp. 52-53.
 - (c) Vallentin, Antonina (b.1893). Leonardo da Vinci, the Tragic Pursuit of Perfection. Translated by E. W. Dickes. New York: Viking Press, 1938. 561 pp. Illus. See pp. 126-130 and an extensive bibliography, pp. 547-551.
- (101) 1527 ALBRECHT DUEERER (1471-1528)
 - (a) Duerer, Albrecht. (Etliche) Unterricht zu Befestigung der Stett (Städte), Schloss und Flescke. Nurnberg, 1527. (Lib. of Cong.)
 - (1) Latin translation published by Charles Wechelus, Paris, 1535.
 - (2) Reprint of German, published by J. Janssen, Arnhem, 1603.
 - (3) Modernized German edition with notes, Berlin, 1823.
 - (4) Modernized German edition with notes, Berlin, 1840.
 - (5) French translation by A. Ratheau, Paris, 1870, plus introduction on the influence of Duerer's ideas.
 - (b) Conway, William Marin. Literary Remains of Albrecht Duerer. Cambridge University Press, 1889, 1959. 288 pp. Contains summary of Duerer's description, pp. 262-273, and bibliography.
 - (c) Goltz, Colmar von der (1843-1916). "Albrecht Duerers Einfluss auf die Entwicklung der Deutschen Befestigungskunst," Über Kuenstler und Kunste, vol. 2 (1865-66), pp. 189-205.
 - (d) Imhof, G. von. Albrecht Duerer in seiner Bedeutung f.d. mod. Befest. Grenzboten, Noerdingen, 1871, 1872. 143 pp.
 - (e) Lavedan, Histoire de l'Urbanisme (16), vol. 2, pp. 20-21.



(f) Waetzoldt, Wilhelm Adolf. Duerers Befestigungslehre.
Berlin, 1916.

(102) 1554 PIETRO CATANEO (PIETRO CATTANEO). I Quattro primi Libri di Architettura. Colophon: In casa de' figliuoli di Aldo, 1554. Microfilm, University of California, Berkeley.

(103) 1563 BERNARD PALISSY (c. 1510-1589). "De la Ville de Forteresse," Oeuvres Complètes. Paul-Antoine Cap, ed. Paris: J. J. Dubochet et Cie, 1844. 487 pp. (See pp. 113-123).

(a) Morley, Henry (1822-1894). The Life of Bernard Palissy of Saintes (the Potter). London: Chapman and Hall, 1855. 2 vols.
Includes translation of Palissy's papers, see pp. 284-97.

(104) 1565 GIROLAMO MAGGI (d. 1572). Della Fortificatione della Città. Venetia, 1565.

(105) 1570 GIORGIO VASARI (1511-1571). Quattro Libri d' Architettura, 1570, 1598.

(106) 1582 ANTONIO LUPICINI. Dell'Architettura Militare, 1582.

(107) 1589 DANIEL SPRECKLE. Architectura von Festungen, 1589.

(108) 1592 BONAIUTO LORINI (fl. 1600). Delle Fortificationi, Libri Cinque. Venetia: G. A. Rampazetto, 1592. 219 pp.

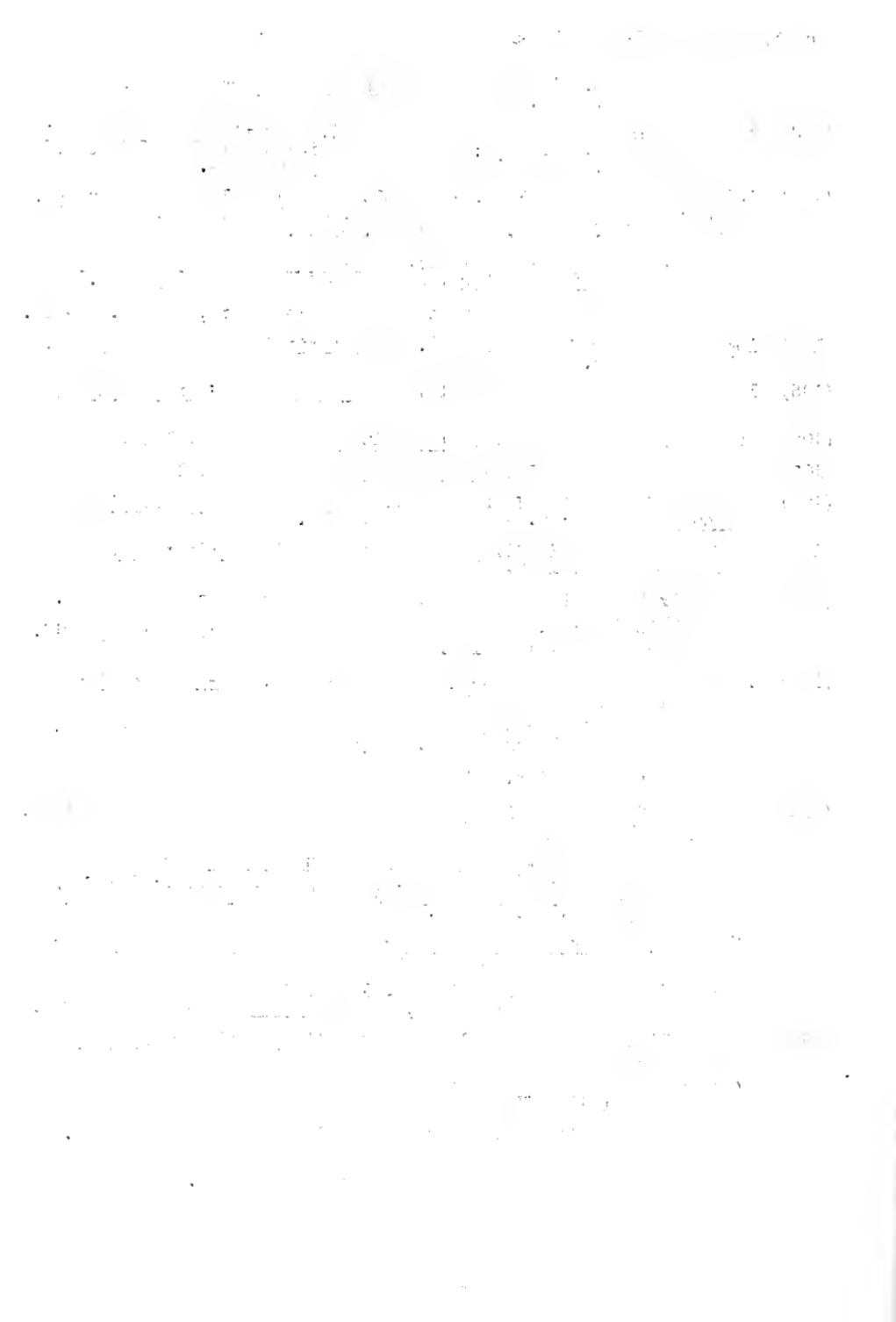
(109) 1598 GIOVANNI BELUCCI. Nuova Invenzione di Fabbricare Fortezze di Varie Forme, 1598.

(110) 1599 FRANCESCO DE MARCHI (b. 1506). Dell'Architettura Militare. Brescia, 1599.
(a) Later edition: Roma: Torchi di M. de Romanis e figli, 1810. Illus. by Luigi Marini.

(111) 1600 JEAN ERRARD DE BAR-LE-DUC (1554-1660). La Fortification Demonstree et Reduite en Art, 1600.
(a) 2nd. edition, revenue et augmente, Paris: (Jean Messanger) a la Rue Blanche ru St. Jacques, 1604.
(b) Enlarged edition, 1620.

(112) 1601 JACQUES PERRET DE CHAMBERY. Des Fortifications et Artifices, Architecture et Perspective. Paris, 1601.
(a) German edition. Erlicher Festungern Staett, Kirchen, Schloesser, und Haeuser wie die aufis starkste, zierlichste und bequemste koennen gebawet oder aufergerichtet werden. I. Th. de Bry, ed. Frankfurt, 1602.
(b) Architectura et Perspectiva; des Fortifications et Artifices. Frankfurt-am-Main: W. Richter, 1602.
(c) Brinckmann, Albert Erich (b. 1877). "Franzoesiische Idealstadt um 1600 und 1800," Der Staedtebau, 1909, pp. 158-9.

(113) 1615 VINCENZO SCAMOZZI (1552-1616). L'idea della Architettura Universale. Venetiis, 1615.
(a) Dell'idea della Architettura Universale di Vicenzo Scamozzi. Venezia: G. Albrizzi, 1714.
(b) L'idea dell'Architettura Universale. Stefano Ticozzi, ed. Milano, 1838.
(c) Microfilm, University of California, Berkeley.



(114) 1619 JOHANN VALENTIN ANDREE (1586-1654). Christianopolis. Strassburg, 1619.

- Held, Felix Emil, ed. New York, 1916. Illus. (See pp. 688-699).
- Abercrombie, Patrick (1879-1957). "Christianopolis, Ideal City," Town Planning Review, 8 (April, 1920), pp. 99-104. Plan.
- Lavedan, Histoire de l'Urbanisme (16), vol. 2, p. 26.
- Tunnard, The City of Man (29), pp. 52-53. Illus.

(115) 1623 TOMMASO CAMPANELLA (1568-1639). Civitas Solis. Frankfurt, 1623.

- "City of the Sun," in The Quest for Utopia, edited by Glenn Negley and J. Max Patrick. New York: Henry Schuman, 1952. See pp. 313-348.
- Firpo, Luigi. Ricerche Campanelliane. Firenze: G. C. Sansoni, 1947. A bio-bibliographical compendium of works by an on Campanella.

C. Other Ideal Cities

(116) 1482 LEONE BATTISTA ALBERTI (1404-1472). De Re Aedificatoria, 1482.

- English edition by James Leoni. London: Thos. Edlin, 1739. See Vol. I, pp. 63-75; vol. II, pp. 22-23; Vol. IV.

(117) 1516 SIR THOMAS MORE (1478-1535). Utopia. Leyden, 1516. Many editions exist in English. Describes regional relationships and social relationships, but is not explicit about the form of the city.

(118) 1570 ANDREA PALLADIO (1518-1580). I Quattro Libri dell'Architettura. Venice: Dominicoste Franceschi, 1570.

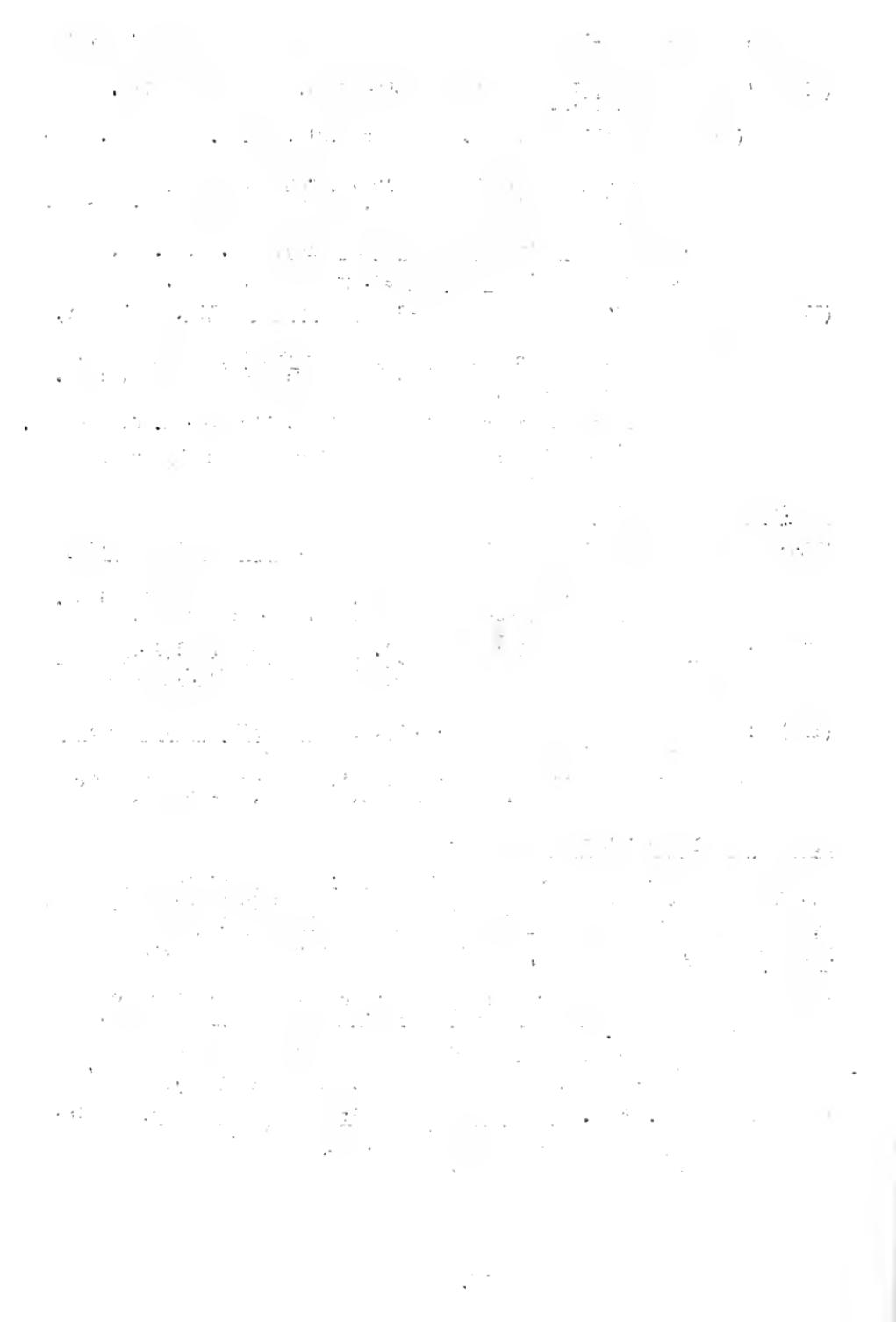
- English edition by Giacomo Leoni, with notes and remarks by Inigo Jones. London, 1742. See pp. 78-79, 95.

D. The Model Spanish Colonial City

In 1573 King Philip (reign, 1556-98) revised the original "Laws of the Indies" of 1523 and issued detailed ordinances concerning the layout, protection and beauty of the colonial towns founded in America. The plan was in the Greco-Roman-Bastide tradition with a grid-iron plan and central plaza, in this case surrounded by the church, the government hall and two other important buildings.

(119) Nuttall, Zelia. "Royal Ordinances Concerning the Laying Out of New Towns." Hispanic American Historical Review, 4 (1921), pp. 743-753.
Translations of the original laws (Archivo Nacional Madrid, ms 3017, Bulas y Cédulas para el Gobierno de las Indias). (Correction in same journal, vol. 5, no. 2 (1922)).

(120) Leipziger, Hugo. The Architectonic City in the Americas. Austin: University of Texas Press, 1944. 68 pp. Illus. and maps. Interesting photos and maps of pre-Columbian and early Spanish towns and ruins.



(121) Smith, Robert C. "Colonial Towns of Spanish and Portuguese America," Journal of the Society of Architectural Historians, 14 (Dec., 1955), pp. 3-12.
Discussion of the origin and geographical extent of the grid-iron model in the Americas. Footnotes.

(122) Stanislawski, "Early Spanish Town Planning in the New World," Geographical Review (63-e)

(123) Violich, Francis. Cities of Latin America. New York: Reinhold Publishing Corp., 1944. 241 pp.
Little on the origin of the model, but much detail on physical description, its influence and geographical extent.

(124) Lavedan, Histoire de l'Urbanisme (16), vol. 2, pp. 469-473.

V. NINETEENTH CENTURY CITIES: MODEL AND IDEAL

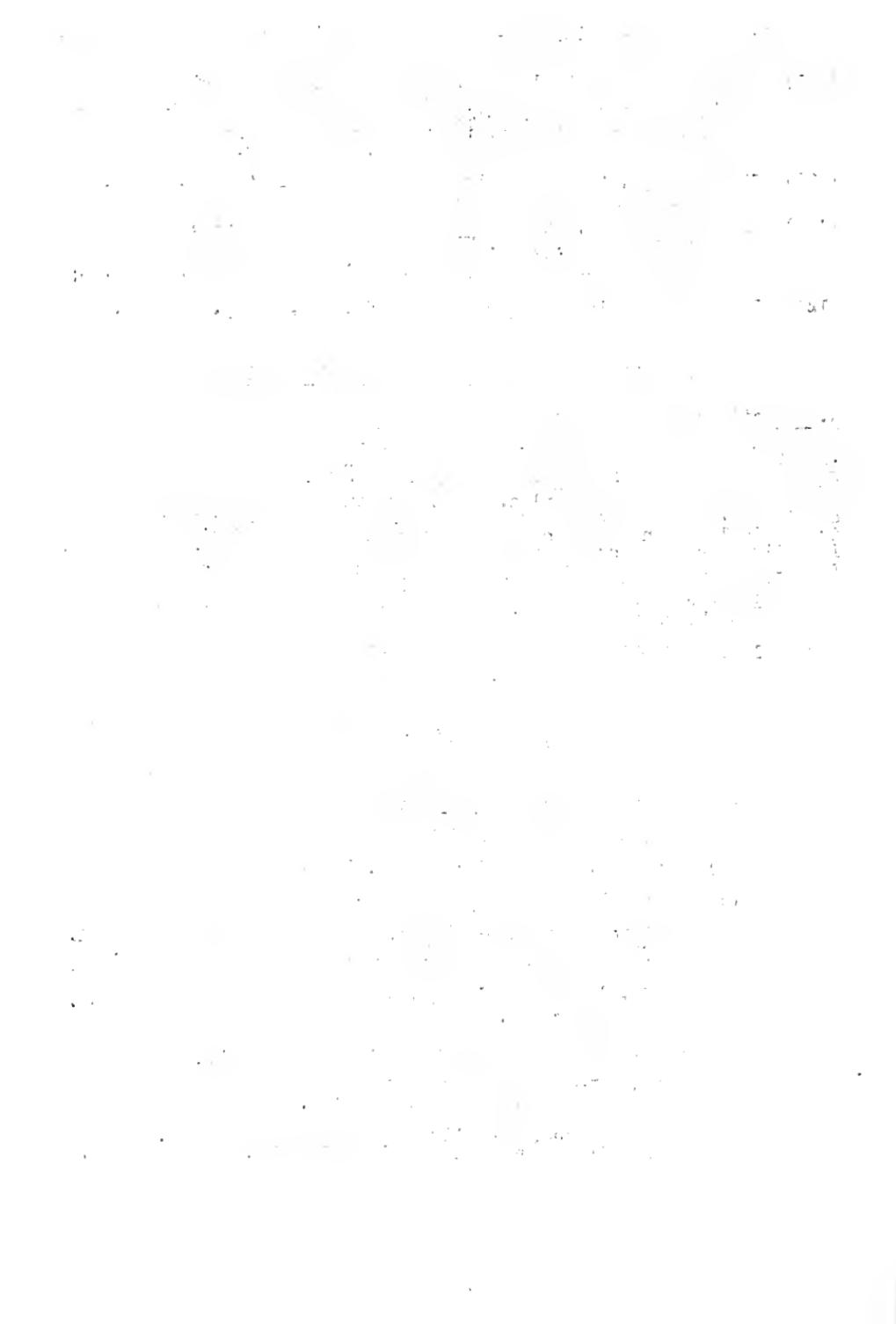
A. Reactions to the Industrial Revolution

Arranged by date. After 1750 the development of an increasingly industrial society greatly changed the requirements of urban design. The factory and its relation to the rest of the town was of special importance in the plan. Even more important was the general consideration of a better way of life for the urban dweller, now increasingly dependent upon these larger industries. During this formative period, largely isolated individuals found no single solution to the common problem they perceived, and in most cases the physical plans were not influential although their social criticism is a major foundation for continuing utopian thought. The movement for housing reform also began in this period.

(125) 1793 CLAUDE-NICOLAS LEDOUX (1736-1806)

While in prison during the French revolution, Ledoux developed an ideal scheme for a salt factory town. He chose a central plan with the factory as its focus. At the edges, instead of a wall, the public buildings and residences blend with the countryside, forming an early garden city. Part of this scheme was actually built, but now lies in ruins.

- (a) Ledoux, L'Architecture Considerée sous le Rapport de l'art, de Mœurs et de la Legislation. (Written in 1793). Paris, 1802.
- (b) Ramee, D., ed. Paris: Lenoir, 1847.
- (c) Microfilm, Society of Architectural Historians.
- (d) Kaufmann, Emil (1891-1953). Von Ledoux bis Le Corbusier: Ursprung und Entwicklung der Autonomiearchitektur. Wien and Leipzig: Verlag dr. Rolf Passer, 1933. 64 pp. Illus. and plans.
Stresses the architectural aspects of Ledoux' plans. Bibliography.
- (e) ——. "Three Revolutionary Architects," Transactions of the American Philosophical Society, 42:5 (1952), pp. 471-557.
Briefly describes Ledoux' plan. Bibliography.
- (f) Lavallat-Haug, Geneviève. Claude-Nicolas Ledoux. Paris and Strassbourg: Librairie Istra, 1934. 146 pp. Illus.



- (g) Lavedan, Histoire de l'Urbanisme (16), vol. 2, pp. 246-248.
- (h) Raval, Marcel, and J. Ch. Moreux. Claude-Nicolas Ledoux, Architecte du Roi. Paris: Arts et Métiers Graphiques, 1946. 242 pp. Illus. and maps. Bibliography, pp. 243-245.
- (i) Zevi, Storia dell'architettura moderna (31), pp. 603-604.

(126) 1808 FRANCOIS MARIE CHARLES FOURIER (1772-1837)

Fourier, a social scientist and reformer, presented several different physical plans for his comprehensive, socially revolutionary schemes for an ideal community. In one scheme all members lived in a single huge palace, called a "Phalanstery," architecturally very like Versailles. In another scheme, "La ville du Garatisme," there were three concentric rings of activities: at the center, commercial and administrative; then, the industrial; finally, the agricultural. Fourier's social philosophy was very influential and many voluntary communities, including the famous Brook Farm, endeavored to follow his precepts. Only one of these, started by Godin Steel Company used his physical scheme. No thorough account of his influence related to city planning is available in English.

- (a) Fourier, Théorie des Quatre Mouvements et des Destinées Générales, 1808.
Here he advocates a cooperative organization of society into "phalansteries," each one large enough to allow for industrial and social needs of the group.
- (b) ——. Traité de l'Association Domestique-Agricole. 1822. 2 vols.
- (c) ——. Le Nouveau Monde Industriel et Sociétaire. Paris, 1829. 2 vols.
Plan and perspective of the phalanstere.
- (d) ——. Théorie de l'Unité Universelle. Paris, 1841.
- (e) ——. Oeuvres Complètes. Paris, 1841-1848. 6 vols.
- (f) ——. Cités Ouvrieres, Des Modifications à Introduire dans l'Architecture de Villes. Paris, 1849.
- (g) Bauer, Catherine. Modern Housing. Cambridge, Mass.: Houghton-Mifflin, 1934. 351 pp. Illus.
Good brief coverage of the 19th. Century idealists and their relation to the planning movement. See p. 73.
- (h) Considerant, Victor Prosper (1808-1893). Description du Phalanstère et Considérations Sociales sur l'Architectonique. Paris, 1848.
- (i) ——. Exposition Abrégée du Système Phalanstérien de Fourier. Paris: Librairie Phalansterienne, 1848. 114 pp.
- (j) ——. La Destinée Social. Paris, 1851. 4th. ed. 2 vols.
- (k) Encyclopedia of the Social Sciences. (7), vol. 6, pp. 402-404 and bibliography.
- (l) Lavedan, Histoire de l'Urbanisme. (17), vol. 3, pp. 76-81.
The most valuable summary of Fourier's scheme and his influence.

and the polymerization reaction was stopped. The polymer was isolated by precipitation in methanol and dried under vacuum. The yield was 10.0 g. (40%). The infrared spectrum showed absorption bands at 3050, 1650, 1500, 1450, 1350, 1250, 1150, 1050, 950, 850, 750, 650, and 550 cm⁻¹. The IR spectrum was identical with that of poly(1,3-butadiene).

- (m) Mumford, Culture of Cities (20), p. 393.
- (n) Purdom, The Building of Satellite Towns (22), p. 39.

(127) 1817 ROBERT OWEN (1776-1858)

Between 1813 and 1825 Owen was extremely active in public and industrial life in England in order to promote his solution for the masses of unemployed urban workers. His scheme consisted in moving them to a small town of limited population in which the residences and workshops formed a large central square where common facilities, schools, kitchens etc., were located. Larger industry and agriculture took place outside the town enclosure. Owen's plan influenced many social idealists of the day, and after 1835 Owen went to the United States and founded several communities himself. Owen wrote a good deal, and often republished similar material under various titles.

- (a) Owen, Report to the Committee of the Association for the Relief of the Poor. Glasgow, 1817.
 - (1) Republished as: A New View of Society, or Essays on the Formation of the Human Character. London, 1818. 85 pp.
 - (2) Also published as: "New View of Society," Collected Papers, vol. 2. of the Biography, London, 1858. 358 pp. This contains a complete physical description, detailed financial proposals, and a drawing of his plan.
- (b) ——. Report to the County of Lanark. Glasgow, 1821. Republished in Collected Papers, v. 2. of Biography. London, 1858. Similar to the above description, but briefer. (See p. 283-1).
- (c) Ashworth, The Genesis of Modern British Town Planning. (2), pp. 120-121.
- (d) Bauer, Modern Housing (126-g), pp. 68-73. A brief description of Owen's ideal town and his relation to legislation for the poor of his time.
- (e) Encyclopedia of the Social Sciences.
- (f) Harvey, Rowland Hill (1889-1943). Robert Owen, Social Idealist. Berkeley: University of California Press, 1949. 269 pp. Bibliography, pp. 251-63.
- (g) Lavedan, Histoire de l'Urbanisme. (17), vol. 3, pp. 81-84.
- (h) Mumford, Culture of Cities (20), pp. 392-393.
- (i) Podmore, Frank. Robert Owen. London and New York: Hutchinson & Co., 1906, 1919, 1924, 1926. 688 p. Illus. Biography, without special emphasis on physical plan.
- (j) Purdom, The Garden City. (21), pp. 5-6.
- (k) "Owen's Proposed Model Town of Harmony", Garden City, 1 (Feb., 1906), pp. 16-18.
- (l) The National Library of Wales, A Bibliography of Robert Owen. London: Humphry Milford, 1925. 90 pp. A very useful bibliography on a very confusing subject.

1. $\pi_1(\mathbb{P}^1 \setminus \{x_1, x_2\}) \cong \langle a, b \mid a^2 = b^2 = 1 \rangle$

(128) 1840 ETIENNE CABET (1788-1856)

Cabet was a political radical and was exiled from France (1834-39) for his articles. Under the influence of Owen, he went to the United States and in 1849 founded a utopian community. His book *Icaria*, though primarily politically and economically oriented suggests a large city like Paris, but "rationalized" to a grid-iron pattern with two large circular boulevards. He proposed separation of pedestrian and wheeled traffic and the isolation of heavy industry out of the city. His social ideas influenced the socio-political nature of American utopian communities but not their physical schemes.

- (a) Cabet, Voyage et aventures de Docr William Carisdall en Icarie, traduit de l'anglais de Francis Adams (pseud.) par Th. Durriut. Paris: H. Souverain, 1840. 2 vols, in one.
(1) Voyage en Icarie. Paris: Au Bureau du Populaire, 1846, 1848. 600 p.
For physical description, see 20-2.
- (b) —— Colonie Icarienne aux Etats-Unis d'Amerique. Sa Constitution, ses lois, sa situation materielle et morale aupres le premier semestre 1855. Paris: chez l'auteur, janvier 1856. 239 pp.
- (c) Bauer, Modern Housing. (126-g), p. 74
- (d) Encyclopedia of Social Sciences.
- (e) Lavedan, Histoire de l'Urbanisme. (17), vol. 3, pp. 84-88.
Paris 1941.
The most complete description of Cabet's physical plan and its influences.

(129) 1845 JOHN MINTER MORGAN

Morgan and a group of Anglican clergy proposed a village scheme physically similar to Owen's also for the unemployed lower classes, but based on a very strict Anglican morality.

- (a) Morgan, Letters to a Clergyman on Institutions for Ameliorating the Condition of the people. 1845.
- (b) —— The Christian Commonwealth. London: Longman, Brown, Green and Longmans, 1849. 151 p. Illus, and plan.
- (c) Ashworth, Modern British Town Planning. (2), pp. 123-125.
Shows the relation of Morgan to Owen and Buckingham.

(130) 1848 JAMES SILK BUCKINGHAM (1786-1855)

A traveler and lecturer, Buckingham wrote widely of his many trips, and was a vigorous idealist and advocate of free trade and temperance. His scheme for "Victoria" was of a central type, remarkably similar to that of the Renaissance Andree in plan. Aside from the physical plan, his proposal included a moral and social scheme with a financial system designed to create and to support the proposed community. The idea of a practical financial scheme was to have influence on Howard, although no "Victoria" was ever started.

- (a) Buckingham, National Evils and Practical Remedies, with a Plan for a Model Town. London: P. Jackson, late Fisher, son and Co. 1849. 512 p. Illus.



- (b) Abercrombie, Patrick. "Victoria, Ideal City," Town Planning Review, 9 (Mar., 1921), pp. 15-20. Illus. and plans.
- (c) Ashworth, Modern British Town Planning (2), pp. 124-126.
- (d) Bauer, Modern Housing (126-g), pp. 74-77.
- (e) Purdom, The Garden City. (21), pp. 9-13.
- (f) ----, The Building of Satellite Towns (22), p. 39.
- (g) Sharp, Thomas (b. 1901). "The English Tradition in the Town II, Hell, Utopia, and Middlesburg," Architectural Review, 79 (Jan., 1936), pp. 21-24.
Brief description of "Victoria".
- (h) Stewart, A Prospect of Cities. (26), pp. 168-173.
- (i) Turner, Ralph Edmund (b. 1893). James Silk Buckingham, a social biography. London: Williams and Northgate, 1934. 463 p. Illus.
See p. 435-441. Bibliography p. 445-458.
- (j) "Model town of James Silk Buckingham," Garden City, 1 (Mar., 1906), p. 33.

(131) 1871 JULES VERNE (1828-1905)

Verne was a French novelist who inaugurated a new school of fiction, basing stories on technological innovations and progress. In this case he wrote of an ideal town very much like present day fine suburban areas.

- (a) Verne, Les cinq cent millions de la Begum. Paris: J. Hetzel et cie. 1871. 185 p.
English translation, Works of Jules Verne, ed. Charles F. Horne. New York: R. Tyler Daniel Co., 1911, Vol. 11.
- (b) Benot-Levy, George. "An Ideal City," House Beautiful, 53 (Feb., 1923), pp. 160, 208.

(132) 1875 DR. BENJAMIN WARD RICHARDSON

Richardson was an English physician and sanitary reformer.

- (a) Richardson, Dr. Benjamin ward. Hygeia: A City of Health. London: Macmillan & Co. 1876.
- (b) Purdom, The Garden City (21), pp. 12-14.

(133) 1888 EDWARD BELLAMY (1850-1898)

Bellamy was an American novelist, social theorist and leader in the American Nationalist movement. His extremely popular book, "Looking Backward," describing a small socialist town was a direct influence on Howard.

- (a) Bellamy, Looking Backward, 2000-1887. Boston: Ticknor & Co. 1888. 470 pp.
For physical description of his town see p. 27.
- (b) ----, Equality. New York: D. Appleton & Co., 1897. 412 pp.
See p. 291-5.



- (c) Morgan, Arthur Ernest (b.1878). Edward Bellamy. New York: Columbia University Press, 1944. (Series: Columbia Studies in American Culture no. 15). 468 pp.
- (d) Purdom, The Building of Satellite Towns. (22), p. 27.

(134) 1891 WILLIAM MORRIS (1834-1896)

English poet, prominent socialist, and leader in the decorative arts. He fiercely denounced the late Victorian town and wanted to restore the gardens, the fields and also the manual arts to their true position in the lives of men and society. His influence on the town planning movement was indirect, striking at the roots of contemporary self-satisfaction.

- (a) Morris, William. News from Nowhere. London: Reeves & Turner, 1891. 278 pp.
Describes his utopian town, p. 24-5, 75-6, 80-1.
- (b) Ashworth, Modern British Town Planning. (2), pp. 170-172.
- (c) Clutton-Brock, A. William Morris: His work and Influence. London, 1914.
- (d) Encyclopedia of the Social Sciences, vol. 11, p. 21.
- (e) Morris, May. William Morris, Artist, Writer Socialist. 2 vols. Vol. 2 contains reprints of relevant articles. See pp. 126-39.
- (f) Purdom, The Garden City. (21).

(135) 1898 SIR EBENEZER HOWARD (1850-1928)

An English shorthand reporter and social reformer, founder of the Garden City Movement. His single, short book has been and continues to be the basic thinking for a large segment of the modern planning movement. He proposed a small concentric city of limited population surrounded by a permanent "Green belt" of agricultural land. Towns of this type were to form a satellite relation to the larger English cities, to help guide population growth away from the "too congested" large cities. This scheme for the Garden City has had influence in at least five spheres: 1) The analysis and logical placement of urban functions within a city, 2) The division of the town into residential units, each having a population required for one elementary school, 3) The use of a schematic presentation to communicate the basic idea of the plan, 4) The ideal character of a town combining city and country, 5) The regional control of population growth into urban and non-urban areas.

- (a) Howard, Tomorrow, A Peaceful Path or Real Reform. 1898.
(1) Reprinted as Garden Cities of Tomorrow. London: Faber and Faber Ltd., 1902, 1945. 1945 edition Ed. and Preface by F.J. Osborn, with introductory essay by Lewis Mumford.
- (b) ——, Domestic Industry as it Might Be. London, 1906.
Pamphlet.
Explanation of his idea of cooperative house-keeping.
- (c) Ashworth, Modern British Town Planning (2), pp. 141-142, and footnotes.
- (d) Bauer, Modern Housing (126-g), pp. 110-113.



- (e) Eden, W. A. "Studies in Urban Theory II: Ebenezer Howard and the Garden City Movement," Town Planning Review, 19 (Summer, 1947), pp. 123-43.
- (f) Giedion, Space, Time and Architecture (10), pp. 508-511.
- (g) Lavedan, Histoire de l'Urbanisme (17), vol. 3, pp. 145-153.
- (h) Macfayden, Dugald. Sir Ebenezer Howard, and the Town Planning Movement. Manchester University Press, 1933. 166 pp. Illus. and plans.
A personal history of Howard and other men active in the movement.
- (i) Mumford, Culture of Cities (20), pp. 396-400.
- (j) Osborn, Frederick James. "The Garden City Movement, Reaffirmation of the Validity of Howard's Idea," Landscape Architecture, 36 (Jan., 1946), pp. 43-54.
- (k) ——. "The Country-belt Principle, Its Historical Origin," Town and Country Planning, 13 (Spring, 1947), pp. 17-8.
- (l) Purdom, The Garden City (21), pp. 17-27.
- (m) ——, The Building of Satellite Towns. (22), pp. 25-29.
- (n) Zevi, Storia dell'architettura moderna. (31).
For bibliography on the Garden City Movement pp. 579-80.

B. Utopias in New Lands

During the 19th century there was an urge to create new communities and a better way of life, and this opportunity was available for many people in the virgin lands and forests on the continents of America, Australia and New Zealand. A rich literature is available to describe the main interest of these communities, that is, the new social, political and economic ways of life they were attempting to achieve. Few experiments however, were based on the importance of physical planning and carrying out any specific form of physical arrangement.

General References

- (136) Calverton, Victor Francis. Where Angels Dared to Tread. New York: Bobbs-Merrill Co., 1941. 381 pp.
Concerned mainly with the economic aspects of the socialist and communist utopian colonies established in many parts of the U.S.
- (137) "Early Cooperative Communities in the United States," Garden City, (July, 1906) 1, pp. 130-131.
- (138) Hinds, William Alfred. American Communities. Oneida, N.Y.: Office of the American Socialist, 1878, 176 pp.
Quite a complete list of Utopian communities, with brief descriptions of each. No emphasis on physical design.
- (139) Holloway, Mark. Heavens on Earth, Utopian Communities in America 1680-1880. New York: Library Publishers, 1951. 240 pp.
Bibliography pp. 232-234.
- (140) Nordhoff, Charles (1830-1901). The Communistic Societies of the United States. New York: Harper & Bro., 1875. 439 pp.
Numerous engravings showing the character of communities.

For the first time in history, we have the opportunity to end poverty in our lifetimes.

10. The following table gives the number of cases of smallpox reported in each State and the District of Columbia during the year 1881.

1. The first step in the process of socialization is the birth of the child. This is a time of great physical and emotional change for both the mother and the father. The parents must learn to care for their new baby, which requires a great deal of time and energy. They also need to adjust to the fact that they are now parents and will have to make many decisions about how to raise their child.

(141) Thwaites, R.G. ed. Early Western Travels. Cleveland: Arthur H. Clark Co., 1905. 32 vols.
See Bullock, W. "Sketch of a Journey through the Western States of North America.", Vol. 19, p. 140.

Specific Communities

(142) Francis, Emerick K. (b. 1906). In Search of Utopia, the Mennonites in Manitoba. Glencoe, Ill.: Free Press, 1956. 294 pp.

(143) Huntington, Charles White. Enclaves of Single tax, being a Compendium of the Legal Documents Involved, Together with a "Historical" Description. Harvard, Mass.: Fisk Warren, 1921. 3 vols.
On the principles of single-tax economies with examples.
Contains the not unusual physical plan of Montoliu for Fairhope.

(144) "John Buonarotti Papworth, Architect to the King of Wurtemburg," Architectural Review, 79 (June, 1936), pp. 279-81.
Contains a brief account of Papworth's utopia, "Hygea".
(a) Giedion, Space, Time and Architecture (10), pp. 682-688.

(145) Linn, William Alexander (1856-1917). The Story of the Mormons, from the date of their Origin to the year 1910. New York: MacMillan Co., 1902. 637 pp.
The history of ideal and individuals with little emphasis on physical plan. See p. 228.

(146) Montoliu, C. "Fairhope (a single tax colony), a town planning scheme for its development into an organic city," American City, 24 (April, 1921), pp. 355-359. Illus. and plan.
(a) Garden Cities and Town Planning, 11 (July, 1921) pp. 162-166.
Illus. and plan.
Detailed plan and philosophical background for a city.

(147) Nelson, Lowry (b. 1893). The Mormon Village: A Pattern and Technique of Land Settlement. Salt Lake City: University of Utah, 1952. 296 pp. Maps and air photos.
Detailed descriptions of the origins and spread of the "City of Zion" concept among the Mormons. See p. 34. Bibliography, pp. 287-291.

C. An Ideal City in Australia

The plan of Adelaide by E.G. Wakefield is of great importance as an early example of the use of a green belt around a city. It became especially famous in Howard's book. (135-a)

(148) Wakefield, Edward Gibbon (1796-1862). A Letter From Sydney, the Principal Town of Australasia, and other Writings on Colonization. London: Robert Couper, 1829. 256 pp.
(a) Another Edition. London and Toronto: J.M. Dent and Sons. Ltd. New York: E.P. Dutton & Co., 1929.
See p. 159 for reference to physical plan.

(149) ——. A View of the Art of Colonization. London: J.W. Parker, 1849. 513 p.

(150) Adelaide, City of. Official Illustrated Guide. Adelaide: Goodwin and Co., 1906. 216 pp. Illus. and maps.

(151) Bennett, J.F. Historical and Descriptive Account of South Australia. London: Smith, Elder & Co., 1843.

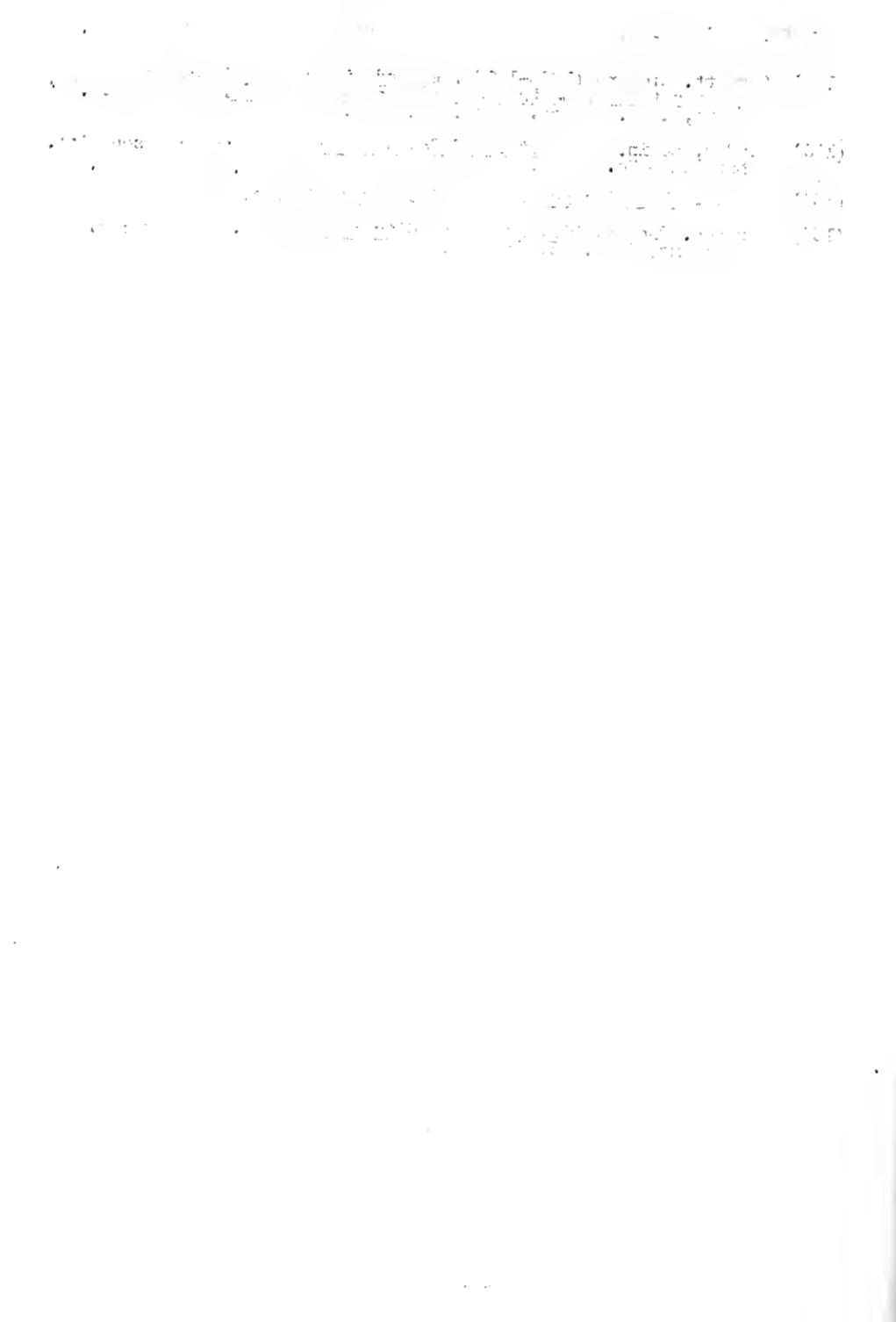


(152) Garnett, Richard (1835-1906). Edward Gibbon Wakefield, The Colonization of South Australia and New Zealand. London: T.F. Unwin, 1898. 376 pp. Illus. and maps.

(153) Hodder, Edwin. The History of South Australia. London: Amson, Low, Marston & Co., 1893.

(154) Purdom, The Building of Satellite Towns (22), p. 38.

(155) Worsnop, Thomas. History of the City of Adelaide. Adelaide: J. Williams, 1878. 457 pp. Map.



Part Three: TWENTIETH CENTURYI. CONCENTRIC IDEAL CITIES

The concentric ideal form describes that in which the various functions are separated from each other and arranged in concentric rings. Commonly this arrangement specifically requires the central area to be commercial-civic, surrounded by residential, then by industrial functions. This chapter has been divided into three sections because of three fundamentally different approaches to the scale of the town or city.

A. Small Concentric Cities.

Many of these ideal cities are based on the desire to maintain, or restore to some degree traditional pre-industrial social values which it is believed would be achieved by a small population in a small town. Although few are specific about the exact form, most assume residential areas with a commercial and civic area at the center. Most of the idealists who believe in the values of the small town, however, have become interested in regional plans or cellular cities which would theoretically provide this kind of development within the framework of modern urbanizing population.

(156) RALPH ADAMS CRAM (1863-1942)

Cram was an American architect who felt the cure for the evils of modern industrial civilization should be based on small towns with their possibilities of close personal relationships.

(a) Cram, Ralph Adams. Walled Towns. Boston: Marshall Jones Co., 1919. 105 p.
Proposal for a small town of medieval scale.

(157) ARTHUR ERNEST MORGAN (b. 1875)

Morgan is an American civil engineer, ex-president of Antioch College and chairman of the Tennessee Valley Authority (1933-38). He has written much on the positive human values resulting from life in a small community. He uses the word planning to apply to the planning of social inter-action in such a community. Of his many works, few are specific about a physical plan.

(a) Morgan, The Small Community, Foundation of Democratic Life. ed. Baker Brownell. New York: Harper & Bro., 1942. 312 p.
Little on physical plan, see p. 121-39.

(b) ----, Industries for Small Communities: with Cases from Yellow Springs. Yellow Springs, Ohio: Community Service, 1953. 107 p.
Problems and possibilities of various types of industries in a small town.

(c) ----, The Community of the Future and the Future of the Community. Yellow Springs, Ohio: Community Service, Inc., 1957. 166 p.

(158) PRUNO TAUT (b. 1880)

Taut was an architect active in the rationalist movement in Germany in the 1920's. He was active in the housing movement, and contributed to the Werkbund Exhibition in Stuttgart in 1927. He wrote a series of books illustrating the expressionist movement in German architecture and planning.

- (a) Taut, Die Auflösung der Städte, oder Die Erde eine gute Wohnung. Utopie. 30 Zeichnungen mit Text aus der Weltliteratur. Hagen in Westfalen: Folkwang Verlag, 1920. 81 p. Illus.
Thirty utopian diagrams of a highly imaginative and vague type, which express his and others' ideal cities.
- (b) Wasmuth, Lexikon Der Baukunst. Berlin, 1929. See p. 511.
- (c) Zevi, Storia dell'architettura moderna (31), p. 608.

B. Cellular Concentric Cities.

In this group the assumption is made that cities will be large, but it is hoped by many that the neighborhood unit, which is emphasized to a greater or lesser degree, will achieve a small scale of the parts of the city. In actual fact, the neighborhood unit for residential areas has become an axiom for planning, whether or not it is supported by desire for social integration, and usually the concentric scheme is accepted. This section consists in writings of the individuals who have contributed most to the development of the neighborhood idea, its fulfillment in three dimensional form, and many who were active in the housing movement. Historically, Howard has been of fundamental influence on this group.

(159) ALVAR AALTO (b. 1898).

Aalto is a Finish architect, and leader in the organic movement in Scandinavia. Although he has done housing projects, has not written much about planning.

- (a) Aalto, An Experimental Town. Cambridge: Massachusetts Institute of Technology, 1940.
- (b) Zevi, Storia dell'architettura moderna (10)
- (c) Walker, R. New Pencil Points, 23 (June, 1942), p. 42 for diagram.

(160) THOMAS ADAMS (1871-1940)

Adams was a British architect and specialist in town planning. He was active in the Garden City Movement, and secretary of the Association 1900-6. After years of private practice and public service in England, he became town planning advisor in Canada (1914-21). He was later director of the Regional Plan of New York and its environs (1922-30) and then professor at Harvard University. He was a prolific writer on all aspects of planning and translated the neighborhood unit idea into master plans for many communities.

- (a) Adams, Design of Residential Areas: Basic Considerations, Principles and Methods. Cambridge, Mass.: Harvard University Press, 1934. 296 p. Illus. and plans. (Series: Harvard City Planning Studies, Vol. 6.) Clear presentation of the neighborhood, and its relation to the metropolis.
- (b) Kimball, Manual of Information (12). The best bibliographical material on Adams.

(161) ADOLF ABEL (b. 1882)

Abel is professor emeritus in architecture and city planning at the Munich Technische Hochschule.

- (a) Abel, Regeneration der Städte, des Villes, of Towns. Zurich: Verlag fuer Architektur, 1950. Typical concentric cellular scheme, see p. 50-68.

1940-1941 学年第二学期期中考试卷

1946年，中國人民民主政協會議在北平召開，會上通過了《共同綱領》，並選出了中央人民政府委員會。

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(162) CAROL ARONOVICI (1881-1958)

Born in Romania, Aronovici came to the United States and became very active in public agencies for housing and social welfare. He was a consultant in city planning and created master plans for many cities.

- (a) Aronovici, ed. "Housing and Town Planning," Annals of the American Academy of Political and Social Science, 51 (1914), 296 p.
Contains articles by Unwin, Olmstead, Aronovici, etc.
- (b) —, Community Building. Garden City, N.Y.: Doubleday & Co., Inc., 1936. 354 p.
Emphasizes the need for small comprehensible units within the city.
- (c) Kimball, Manual of Information. (12)
Best bibliographical material for most of Aronovici's career.

(163) GASTON BARDET (b. 1907)

Bardet is a distinguished French town planner, active in public and professional agencies. He wrote numerous books during the 40s and 50s.

- (a) Bardet, Pierre sur Pierre, Construction du nouvel Urbanisme. Paris: Edition L.C.B. 1946.
Part VI gives his ideal based on "scientific knowledge of community structure and requirements of individuals". He proposes the "echelon patrachal" of 5-10 families; "echelon domestique", of 50-150 families, and "echelon paroissal", the "neighborhood".

(164) HENRY STERN CHURCHILL (b. 1893)

Churchill is an American architect active in private practice and also in many housing groups and agencies. In the 1930's he was consultant to the U.S. Housing Authority.

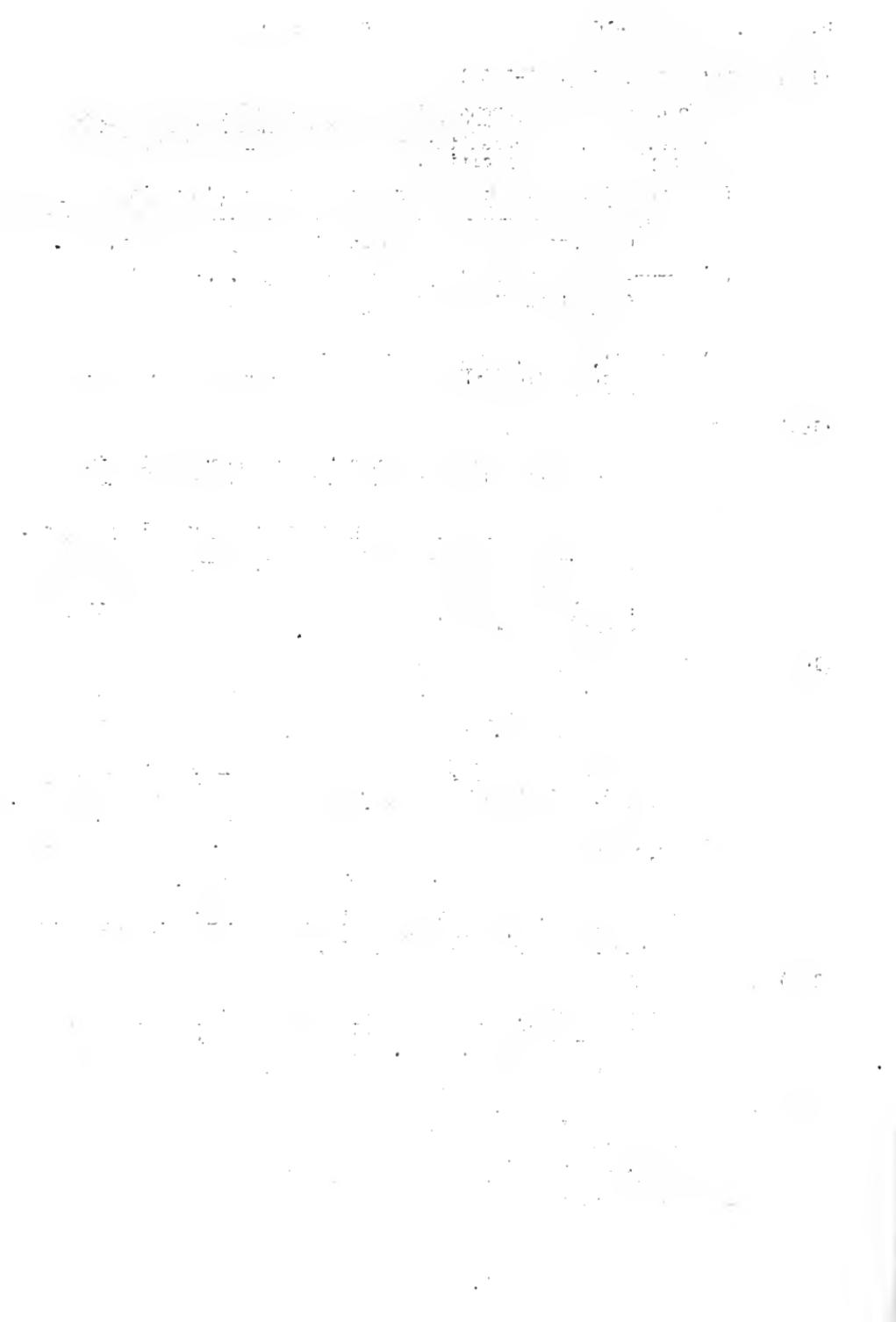
- (a) Churchill, & Roslyn Ittleson. Neighborhood Design and Control. An Analysis of the Problems of Planned Subdivisions. New York: National Committee on Housing, 1944. 39 p.
Consideration of physical and financial environment.
- (b) —, The City is the People. New York: Reynal and Hitchcock, 1945. 186 p.
Proposes flexible neighborhood boundaries.
- (c) —, "Space, Time and People," Building for Modern Man. A Symposium, ed. Thomas H. Creighton. Princeton: Princeton University Press, 1949. p. 219.

(165) ERICH GLOEDEN

- (a) Gloeden, Erich. Die Inflation der Gross-staedte und ihre Heilungsmoellichkeit. Berlin: "Der Zirkel", architektur Verlag GMBH, 1923. 64 p. Illus.
Proposes reuniting work and residence in cells with fifteen minute walking radius.

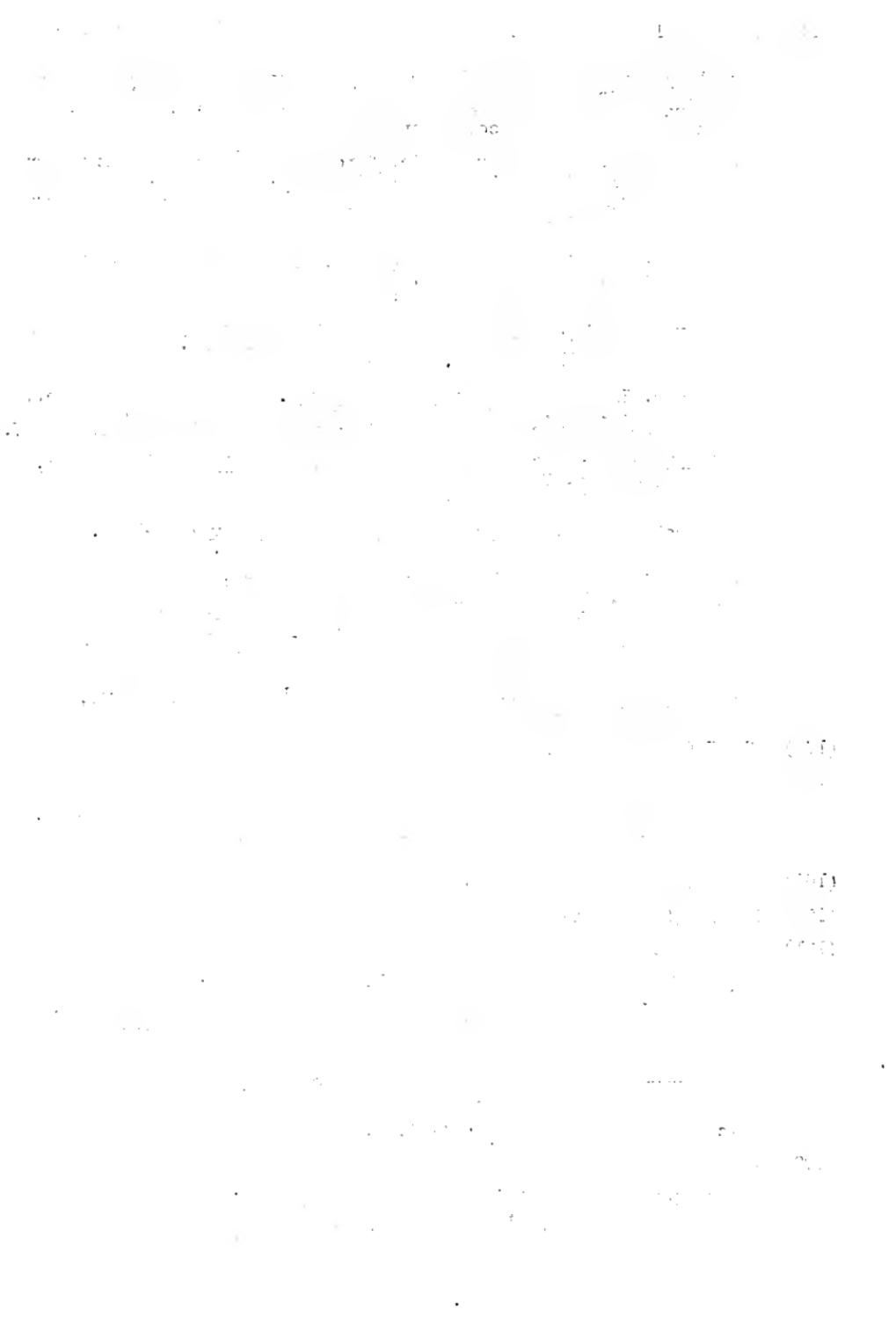
(166) WALTER GROPIUS (b. 1883)

Gropius is a German architect who became head of the Bauhaus (1919-28). During this time he was also very active in the German housing movement and he contributed to the Werkbund Exhibit in Stuttgart in 1927. In the thirties unfavorable



political climate forced his move to England, and from there he was called to the United States to become the Head of the Harvard Graduate School of Design. During the 1940's he published many papers on community development and New Towns.

- (a) Gropius, and Wagner Martin. "Program for City Reconstruction," Architectural Forum, 79 (July 1943), pp. 75-86.
Recommends the establishment of new small townships with accompanying industry to house the excess population, and provide new employment.
- (b) ——, Rebuilding Our Communities. Chicago: Paul Theobald & Co., 1945. 61 p. Illus.
Similar ideas to the above.
- (c) ——, "Organic Neighborhood Planning," Housing and Town and Country Planning Bulletin No. 2, U.N. Dept. of Social Affairs, April 1949. pp. 2-5.
- (d) ——, The Scope of Total Architecture. New York: Harper Bro., 1955. 185 p. (Series: World Perspectives, Vol. 3.)
For chapter on organic neighborhood planning see p. 99-167.
- (e) Ashton, Dore. "A Talk With Gropius," Art Digest, 26 (Jan. 1, 1952), pp. 7-8, 24.
A chatty biography.
- (f) Cook, Ruth V. Walter Gropius, a bibliography 1919-1950. Chicago: American Institute of Architects.
- (g) Giedion, Sigfried. Walter Gropius. New York: Reinhold, 1954. 249 p. Illus. and plans.
The biography of Gropius stressing his importance in interpreting the industrial revolution in terms of architecture. Only a small section covers his ideas of organic planning.
- (h) Zevi, Storia dell'architettura moderna. (31). pp. 132-41, 490-4, 598-60.
- (167) GUTKIND (See no. 219)
- (168) HERMANN HERREY
 - (a) Herrey, Hermann, and Herry, Erna, and Pertzoff, Constantin. "An Organic Theory of City Planning," Architectural Forum, April, 1944.
- (169) HILBERSHEIMER (See no. 220)
- (170) HOWARD (See no. 135)
- (171) RICARDO C. HUMBERT
 - (a) Humbert, La Ciudad Hexagonal. Buenos Aires: Vasco Ekin, S.R.L., 1944. 89 pp.
Humbert combines a hexagonal street pattern with large sized blocks so that all city functions are located within these blocks.
 - (b) ——, "A Hexagonal Layout for cities," Traffic Engineering, 16 (April, 1946).
 - (c) Tunnard, City of Man. (29), p. 67.
- (172) JEAN LEBERTON
 - (a) Leberton, La Cité Naturelle, Recherche d'un Urbanisme Humain. Paris: Editions Paul Dupont, 1945. 177 pp.
A typical cellular concentric scheme.



(173) LE CORBUSIER (See no. 192)

See schemes for Bogota, 1950; Boesiger, Vol. 5, pp. 42-7 and pp. 116-163; and Chandigarh, 1950.

(174) MARS (See no. 222)

(175) MAY (See no. 231)

(176) RODERICK DUNCAN MCKENZIE

McKensie is an American sociologist who developed a theory describing the relations between urban functions called multiple nuclei, where each nucleus is the center of a different function.

(a) McKenzie, The Metropolitan Community. New York: McGraw-Hill Book Co. Inc. 1933. 352 p.
For his exposition of the multiple-nuclei concept, see pp. 191-4.

(177) CLARENCE A. PERRY (1872-1944)

While with the Russell Sage Foundation during the 1910's and 20's, Perry wrote widely on school and community facilities and recreation. Later he became interested in housing, and wrote on specific problems of blighted areas. His main contribution was the detailed thinking out of the possibilities of planning for neighborhood units.

(a) Perry, Wider Use of the School Plant. New York: Russell Sage Foundation, 1910. 423 pp.

(b) ——, "The local Community as a Unit in the Planning of Urban Residential Areas," Urban Community, ed. American Sociological Society. Chicago: University of Chicago Press, 1921.

(c) ——, "Neighborhood and Community Planning," The Regional Survey of New York. New York: Russell Sage Foundation, 1929. Vol. 7., pp. 22-140.
The classical description of the neighborhood.

(d) ——, Housing for the Machine Age. New York: Russell Sage Foundation, 1939. 261 pp. Illus.
See p. 50-83 for the history and significance of the neighborhood unit idea.

(e) Dahir, James. The Neighborhood Unit Plan, Its Spread and Acceptance. New York: Russell Sage Foundation, 1947. 91 pp.
A comprehensive bibliography to 1947, especially of U.S. sources.

(f) Englehardt, N.L. Jr. "School-Neighborhood Nucleus: Analysis of the Residential Community from the standpoint of Requirements of a modern Educational Program," Architectural Forum, 79 (Oct., 1943), pp. 88-90.

(g) Isaacs, Reginald. "The Neighborhood Theory," Journal of the American Institute of Planners, 14 (Spring, 1948), pp. 15-23.
The major article questioning the validity of the neighborhood unit concept.

(h) Kimball. Manual of Information (12).

(i) Mumford, Lewis. "The Neighborhood and the Neighborhood Unit," Town Planning Review, 24 (Jan., 1954), pp. 256-270.

(j) Rasmussen, Steen Eiler. "Neighborhood Planning," Town Planning Review, 26 (Jan., 1957), pp. 197-218.



(178) SIR CHARLES HERBERT REILLY (1874-1943)

Reilly was director of the Liverpool School of Architecture from 1904-1933. He proposed a small neighborhood with 30-40 families around a green space.

- (a) Reilly, The Theory and Practice of Architecture. London: V. Collancz Ltd., 1932. 144 p.
- (b) ——, Scaffolding in the sky, a Semi-architectural Autobiography. London: G. Routledge and Son, 1938. 352 p. See Appendix I.
- (c) ——, Architecture as a Communal Art. London: B. T. Batsford, Ltd., for the Council for the Education in Appreciation of the Physical Environment, 1944. 15 p. Illus.
- (d) Wolf, Lawrence. The Reilly Plan: a new way of life. Intro. by Sir Charles Reilly. London: Nichelson and Watson, 1945. 156 p. Illus.
A description of Reilly's scheme.
- (e) Architectural Review, 99 (June, 1946)
Review of the Wolf book.

(179) LADISLAS SEGOE (b. 1894)

Segoe was born in Hungary, came to the United States in 1921 and worked as a planning consultant during the 1920's and 30's, doing master plans for many of large cities in all parts of the U.S. He was director of the Urbanism Committee of the National Resources Council from 1935-38. His book is one of the standard texts for planning in local government.

- (a) Segoe, Local Planning Administration. Chicago: Institute for Training in Municipal Administration, 1941, 1948. 337 pp.
(Municipal Management Series).
Assumes neighborhoods are useful to plan community facilities.

(180) SERT (See no. 224)

(181) STEIN (See no. 244)

(182) SIR RAYMOND UNWIN (1863-1940)

Unwin was an English architect, who in collaboration with Howard designed the first Garden City, Letchworth. He was very influential in establishing the character of the garden suburb and stressed the need for decentralization in his writings. During the 1920's he was active in various government housing offices, and became chief advisor to the Greater London Regional Planning Committee (1929-33).

- (a) Unwin, Town Planning in Practice, an introduction to the Art of Designing Cities and Suburbs. London: Fisher-Unwin Ltd., 1909, 1914, 1932. 416 pp. Illus. and plans.
Includes complete plans for Letchworth & Hampstead Garden Suburb.
- (b) ——, Nothing Gained by Overcrowding. London: P.S. King and Son, for Garden Cities and Town Planning Association, 1918. 24 p. Illus.
Includes Unwin's scheme for city organization.
- (c) ——, "Scheme for a Satellite Town," Art Quarterly, 8 (1945).

CONTINUATION OF THE TABLE

and the number of colonies per gram of soil. The results are given in Table I.

The results of the first experiment are given in Table II.

The results of the second experiment are given in Table III.

The results of the third experiment are given in Table IV.

The results of the fourth experiment are given in Table V.

(b) *Effect of organic acids on the growth of thermophilic bacteria*

CONTINUATION OF THE TABLE

TABLE VI gives the results of the experiments made to determine the effect of organic acids on the growth of thermophilic bacteria. The results are given in Table VI.

The results of the first experiment are given in Table VII.

CONTINUATION OF THE TABLE

The results of the second experiment are given in Table VIII.

CONTINUATION OF THE TABLE

The results of the third experiment are given in Table IX.

CONTINUATION OF THE TABLE

The results of the fourth experiment are given in Table X.

CONTINUATION OF THE TABLE

The results of the fifth experiment are given in Table XI.

CONTINUATION OF THE TABLE

The results of the sixth experiment are given in Table XII.

- (d) Kimball. Manual of Information (12).
- (e) Purdom. Garden Cities. (21)
For plan of first Garden City see pp. 41-4.
- (f) ----, The Building of Satellite Towns. (22).
See p. 458 for relation of Unwin to Howard in regional planning.

(183) HENRY WRIGHT (1878-1936)

Wright was an American architect who worked with Stein and Mumford on the Regional Plan for New York State, 1926, and later was partner with Stein in the planning of Sunnyside and Radburn projects. He became a strong proponent of the super-block idea. In the 1930's he worked as a consultant to the Housing Division of the Public Works Administration.

- (a) Wright, "Regional Planning," Survey Graphic, 10 (May, 1925). Entire Issue.
- (b) ----, and others, Report to the Commission on Housing and Regional Planning to Governor Alfred E. Smith, 1926.
- (c) ----, "Autobiography of Another Idea," Western Architect, 39-40 (Sept., 1930). Discussion of the relation of the idea of Radburn to Howard.
- (d) ----, Rehousing Urban America. New York: Columbia University Press, 1935. 175 pp. Illus. and Plans
The superblock idea is developed and proposed for more wide-spread use.
- (e) Kimball. Manual of Information (12)
- (f) Mumford, Lewis. "Henry Wright," Pencil Points, 17 (Aug., 1936). A short tribute to Wright on his death.

C. Large Concentric Cities

The fundamental inspiration among these men is awareness, of and enthusiasm for technological change in transportation, materials, and in all aspects of life. Le Corbusier was one of the first to develop this concept fully, and he has been the greatest single influence among the idealists. The concentric form with commercial-civic functions in the center, surrounded by residential areas, remains the basic arrangement of functions in these schemes.

(184) ERNEST W. BURGESS (b. 1886)

Noted sociologist of the University of Chicago.

- (a) Burgess, Urban Areas. Chicago: University Press, 1929.
Analytical scheme describing various functions of the city thought to be found in concentric rings.

(185) LUCIO COSTA

A leader of the modern architectural movement in Brazil, which strictly applies the ideas of Le Corbusier. He was one of the original members of C.I.A.M. (Congrès Internationaux d'Architecture Moderne).

- (a) Costa, "Brasilia," Modulo (Rio de Janeiro), 3 (July, 1957). The entire issue is on the plans submitted for the competition for the new capital. The complete text and drawings of Costa's presentation is included. Portuguese and German.

(b) Holford, Sir William Graham. "Brazilia, a new Capital City for Brazil," Architectural Review (London), 122 (Dec., 1957). See many other architectural publications around these dates for other material.

(186) ERNST EGLI (b. 1893)

Egli is a Swiss architect and town planner. During the 20's he taught architecture in Vienna; during the 30's he was director of the Academy of Art in Istanbul; during the 40's he was lecturer at the Swiss Institute of Technology and became consultant in planning to Lebanon and in 1953 to Turkey.

(a) Egli, Climate and Town Districts, Consequences and Demands. Zurich: Verlag fuer Architektur, 1951. 156 pp. Illus. and plans.
Starting from climatological data he shows that large structures in a park is the best way to plan.

(187) NORMAN BEL GEDDES (b. 1893)

Geddes is an American stage and industrial designer. He was designer of the General Motors Corporation building and exhibit Futurama at the Worlds Fair 1938. Later he did the master plan for the city of Toledo.

(a) Geddes, "City 1960," Architectural Forum, 67 (July, 1937), pp. 57-62. Illus.
Suggests further concentration of buildings supplied by three levels of circulation; pedestrian, auto and delivery.

(b) ——, Magic Motorways. New York: Random House, 1940. 297 pp. Illus.
Suggests that cities be built at automobile scale with huge buildings in huge blocks separated by two levels of streets on all sides. Contains photos of the 1938 World's Fair Futurama.

(188) VICTOR GRUEN (b. 1903)

Gruen was born in Vienna, but came to the U.S. and has been active in private practice during the 1950's, especially in the field of shopping centers. A great deal of the enthusiasm for busy pedestrian areas in downtown areas is a result of his enthusiastic speaking and writing.

(a) Gruen, "Cityscape and Landscape," Arts and Architecture, 72 (Sept., 1955).
General statement of the values of busy urban areas.

(b) ——, A Greater Fort Worth Tomorrow. Fort Worth, Texas: Greater Fort Worth Planning Committee, 1956. 31 pp. Illus. and plans.
The plan which first presented a large urban area with an entirely pedestrian central business district.

(c) ——, City Planning for the Year 2000, an address. Los Angeles: V. Gruen and Associates, 1956.
Presents his ideas for urban regions in the form of "clearly defined and separate nuclei for various activities".

(d) ——, "How to handle this Chaos of Congestion, this anarchy of Scatteration," Architectural Forum, 104 (Sept., 1956), pp. 130-135.
Development of the former ideas with diagrams.



(189) ERNEST M. HEBRARD

- (a) Hebrard, and Andersen, Henrik Christian. Creation of a World Center of Communication. Paris: Privately published, 1913. 128 pp. 2 vol. Ltd. ed. De Luxe. Illus. Grandiose schème in the beaux-arts style.
- (b) Otlet, Paul. "Un Project Grandiose de City Internationale," Premier Congrès International Union de Villes et Communes Belges. Bruxelles: Union International des Villes, 1913. pp. 79-85.
- (c) —, "The Foundations of World Society, and Need for an Intellectual and Civic Center of International Reconstruction." Survey, Journal of Social Work, 41 (Feb., 1, 1919). pp. 598-601.
- (d) Sternfeld, H. "French comrades in America, No. 4, Jean Hebrard," Pencil Points, 13 (Feb., 1932), pp. 75-90, Illus.

(190) LOUIS JUSTEMENT (b. 1891)

Justement is an American architect active in private practice and member of the A.I.A. Committee on Urban Planning (1946-50).

- (a) Justement, New Cities for Old. New York: McGraw Hill, 1946. 232 pp. Illus.

(191) LOUIS KAHN (b. 1901)

Kahn is an American architect who started the Architectural Research Group (1931-3) and was active in planning in Philadelphia during the 1930's as he continues to be today. During the 40's he participated in the design of numerous housing projects.

- (a) Kahn, "City Center," Perspective 4, Yale Architectural Journal, 4 (1957). Reprinted, but not in full, Architectural Forum, 108 (Mar., 1958).

(192) LE CORBUSIER (CHARLES EDOUARD JEANNERET) (b. 1887)

The importance of Le Corbusier in representing the spirit of the huge city composed of towers in a park cannot be overestimated. Actually he has proposed at least five different kinds of ideal cities at different times in his life, plus variations on these main ideas. Roughly his main ideas can be characterized as:

1922 Une Ville Contemporaine, large concentric form (See 192-b)

1930 Algeria, roadtown ribbon form (See 192-c).

1933 La Ville Radieuse, parallel ribbon form (See 192-d).

1945 ASCORAL, sectored ribbon form (See 192-h)

1950 Chandighahr, cellular concentric form (See 192-l, vol.V)

- (a) Le Corbusier, Vers une Architecture Nouvelle. Paris: G. Crés et Cie, 1923. (Series: L'Esprit Nouveau)

(1) Trans. Etchelles, Towards a New-Architecture. New York: Warren & Putnam, also London: Hodder, 1927.

- (b) —, Urbanisme. Paris: G. Crés et Cie, 1924. 284 p. Illus. (Series: L'Esprit Nouveau)



- (1) Trans. Etchells, The City of Tomorrow and Its Planning. New York: Payson and Clark, 1927. Also London: Rodker, 1929. 301 pp.
- (2) The City of the Future. New York, 1930.
- (3) The City of Tomorrow. London, 1947.
Contains the famous description of the "Ville Contemporaine," towers in a park, etc.
- (c) -----. Précision sur un État Présent de l'Architecture et de l'Urbanisme. Paris: G. Crès et Cie, 1930.
Le Corbusier's South American lectures including development of the idea of the skyscraper roadtown.
- (d) -----. La Ville Radieuse; Éléments d'une Doctrine d'Urbanisme pour l'Équipement de la Civilisation Machiniste. Boulogne: Editions de l'Architecture d'Aujourd'hui, [1933]. 344 pp.
- (e) -----. "Vertical Garden City," Architectural Review, 60 (Jan., 1936).
- (f) -----. Sur les Quatre Routes. Paris: Gillimard, 1941.
(Series: Nouvelle Revue Française).
(1) Trans. Todd, The Four Routes. London: Dodson, 1947. 207 pp. Illus.
- (g) -----. La Charte d'Athènes. Paris: Flon, 1943.
(1) Also Paris: Les Éditions de Minuit, 1957.
Statement of the principles of urbanism formulated at the fourth Congrès Internationaux d'Architecture Moderne (CIAM), in 1933.
- (h) ----, et. al. Les Trois Etablissements Humains. Paris: Denoel, 1944. 270 pp.
Report of the Assembly of Constructors for an Architectural Renovation (ASCORAL) edited by Le Corbusier.
- (i) -----. Propos d'Urbanisme. Paris: Bourrelier, 1946.
(1) Trans. Entwhistle, Concerning Town Planning. New Haven: Yale University Press, 1948. 127 pp. Also London: Architectural Press.
- (j) -----. Manière de Penser l'Urbanisme. Paris: Éditions de l'Architecture d'Aujourd'hui, 1946. 181 pp.
Discusses the urbanism of CIAM.
- (k) -----. Les Plans de Paris. 1956.
- (l) -----. Oeuvre Complète. Zurich: Girsberger.
Vol. I, ed. Boesinger and Stonorov: 1910-29.
Vol. II, ed. Boesinger: 1921-34.
Vol. III, ed. Max Bill: 1934-38.
Vol. IV, ed. Boesinger: 1938-46.
Vol. V, ed. Boesinger: 1946-52.
These valuable books contain everything but his literary works.
- (m) Bardet, Gaston. Pierre sur Pierre, Construction du Nouvel Urbanisme. Paris, 1946.
See Part V for his critique of the radial city.

- (n) Korn, History Builds a Town (13).
One of the best short interpretations of Le Corbusier's contribution to ideal cities.
- (o) Hudnut, J., et. al. Le Corbusier. Edited by Stame Papadake. New York: Macmillan Co., 1950.
A collection of articles on all facets of Le Corbusier's work.
- (p) Purdom, Building of Satellite Towns (22), pp. 14-18.
- (q) Stillman, Seymour. "Comparing Wright and Le Corbusier," Journal of A.I.A., 9-10 (April-May, 1948).
- (r) Zevi, Storia dell'architettura moderna (31).
Excellent description of Le Corbusier's influences on the modern movement. Contains the most complete bibliography available, pp. 594-7.

(193) RICHARD NEUTRA (b. 1892)

Neutra was born in Vienna, but came to the United States in the 1920's to become a leader in the modern movement. He carries on an active practice, writes and lectures a great deal and is an active member of CIAM. In 1932 he created a project called "Rush City Reformed."

- (a) Neutra, Wie baut America? Stuttgart: Verlag Julius Hoffmann, 1926. 76 pp., illus.
Contains drawings of his proposals for Rush City and analysis of American building methods.
- (b) ——. "Rush City Reformed," La Cite; Revue d'Architecture et d'Urbanisme (Brussels), 12 (May, 1954).
- (c) ——. "Rush City," U.S. A. Tomorrow, vol. 1, no. 2, pp. 8-14.
Brief and vague description.
- (d) Boesinger, ed. Richard Neutra. Zurich: Ginsberger, 1951, 1955.
Contains his architectural plans and bibliography of his works.
- (e) Zevi, Storia dell'Architettura moderna (31), pp. 486-490.

(194) CHAUNCY THOMAS (1822-1889)

- (a) Thomas, The Crystal Button, 1891.

- (b) Negley, Glenn and J. Max Patrick, ed. The Quest for Utopia. New York: Harry Schuman, Inc., 1952, p. 599.
See pp. 81-107 for description of his utopian city, including huge step-pyramid type apartment houses, two-level circulation and basement warehouses.

(195) HERBERT GEORGE WELLS (1866-1946)

Prolific English novelist, idealist, historian and author of scientific romances.

- (a) Wells, Anticipations of the Relation of Mechanical and Scientific Progress upon Human Life and Thought. Rev. ed. London: Chapman and Hall, Ltd., 1908. 342 pp.
Describes the vast diffused urban areas of the future.

(b) Wells, A Modern Utopia. London: Chapman & Hall, Ltd., 392 pp.
Illus.
 See pp. 185-7, 209-10 for description of his city.

(196) NORBERT WIENER (b. 1894)

Wiener is a Professor of mathematics and an expert in cybernetics.

(a) Weiner, et al. "How can the U.S. Prepare for Atomic War?", "Life, 24 (Dec. 18, 1950), pp. 77-86. Plan.
 Description of a city with a 10-15 mile radius and a void center, all activities arranged along the circumference.

II. SECTORED IDEAL CITIES

The sectored ideal form is that in which the various functions are separated and arranged in a radial or star pattern. The purpose of this arrangement is to allow alternate sectors to be "open space", and to allow it to penetrate to the center of the city.

A. Small Sectored Cities.

The motives for small cities of a sectored type are similar to those of the concentric type.

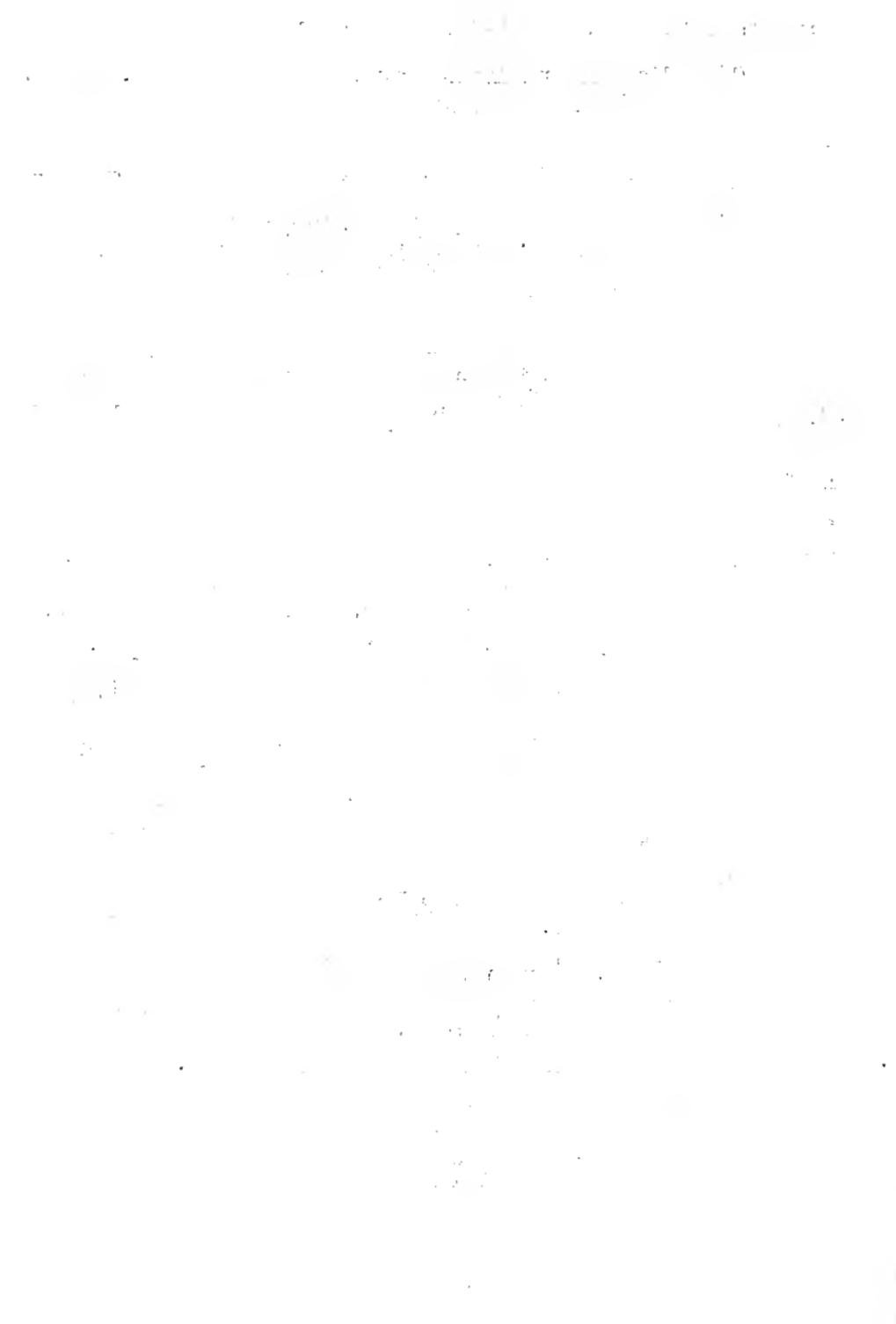
(197) ARTHUR TRYSTAN EDWARDS (b. 1881)

Edwards is a British architect, town planner and writer on subjects related to the visual arts, architecture and New Towns. In early articles he called for higher density development for new areas, instead of the contemporary suburban development. From 1919 to 1925 he was with the Housing Department for the Ministry of Health. In 1933 he founded the "Hundred New Towns Association", to urge the building of complete new towns independent of any metropolitan area.

(a) Edwards, "A Criticism of the Garden City Movement," Town Planning Review, 4 (July, 1913), pp. 150-7.
 (b) ----, "A Further Criticism of the Garden City Movement", Town Planning Review, 4 (Jan. 1914), pp. 312-318.
 Criticizes suburban spread and calls for well-planned high density development.
 (c) ----, "A Model Town Designed for Traffic," Town Planning Review, 14 (May, 1930), pp. 31-41.
 Suggests a true pie-wedge form for the arrangement of functions.
 (d) ----, A Hundred New Towns for Britain. London: Simkin and Marshall, 1933, 1935. Also published in Design for Britain, No. 36, 1944.
 This is his detailed statement for the character of the New Towns he proposed.
 (e) Ashworth. Modern British Town Planning (2), pp. 197, 222.
 (f) Purdon. The Building of Satellite Towns (22), p. 493.

(198) THEODORE FRITSCH

(a) Fritsch, Die Stadt der Zukunft (Gartenstadt), 1896. Also Leipzig: Hammer, 1912.



B. Large Sectored Cities

In large sectored cities the theoretical advantage of the scheme can be fulfilled; that is, the city can grow almost indefinitely while still retaining established relationships. Obviously this type merges with the regional city (See p. 47)

(199) HANS BLUMENFELD

As a young man, Blumenfeld worked with Adolf Loos, one of the founders of the modern architectural movement. During the 1930's he worked with a large building trust in Moscow, and planned the towns of Vladimir and Vyatka, U.S.S.R. During the 1940's he was research assistant to the Philadelphia Housing Authority.

- (a) Blumenfeld, "Theory of City Form, Past and Present," Journal of the Society of Architectural Historians, 8 (July-Dec. 1949), pp. 7-16.
Feels the star-shaped pattern to be a rationalization of the pattern now evolving in large cities.

(200) RUDOLF EBERSTADT (1856-1922)

Eberstadt was a German town planner, writer on housing and planning laws and fighter against land speculation.

- (a) Eberstadt; Bruno Moehring; Richard Petersen. Gross-People; ein Programm fuer die Planung der neuzeitlichen Grossstadt. Berlin: Wasmuth, 1910. 80 pp. Maps and plans.
- (b) ——, Handbuch des Wohnungswesens und der Wohnungsfrage. Jena, 1910, 1920.

(201) HUGH FERRISS (b. 1889)

Ferriss is an American architect, famous primarily for his illustrations of architectural and engineering projects.

- (a) Ferriss, Metropolis of Tomorrow. New York: I. Washburn, 1922, 1929.
Rather vague description of a vast sectored city, with huge skyscrapers in all parts.
- (b) ——, "Towards the Regional City," American City, 69 (Feb., 1954), pp. 9-10.

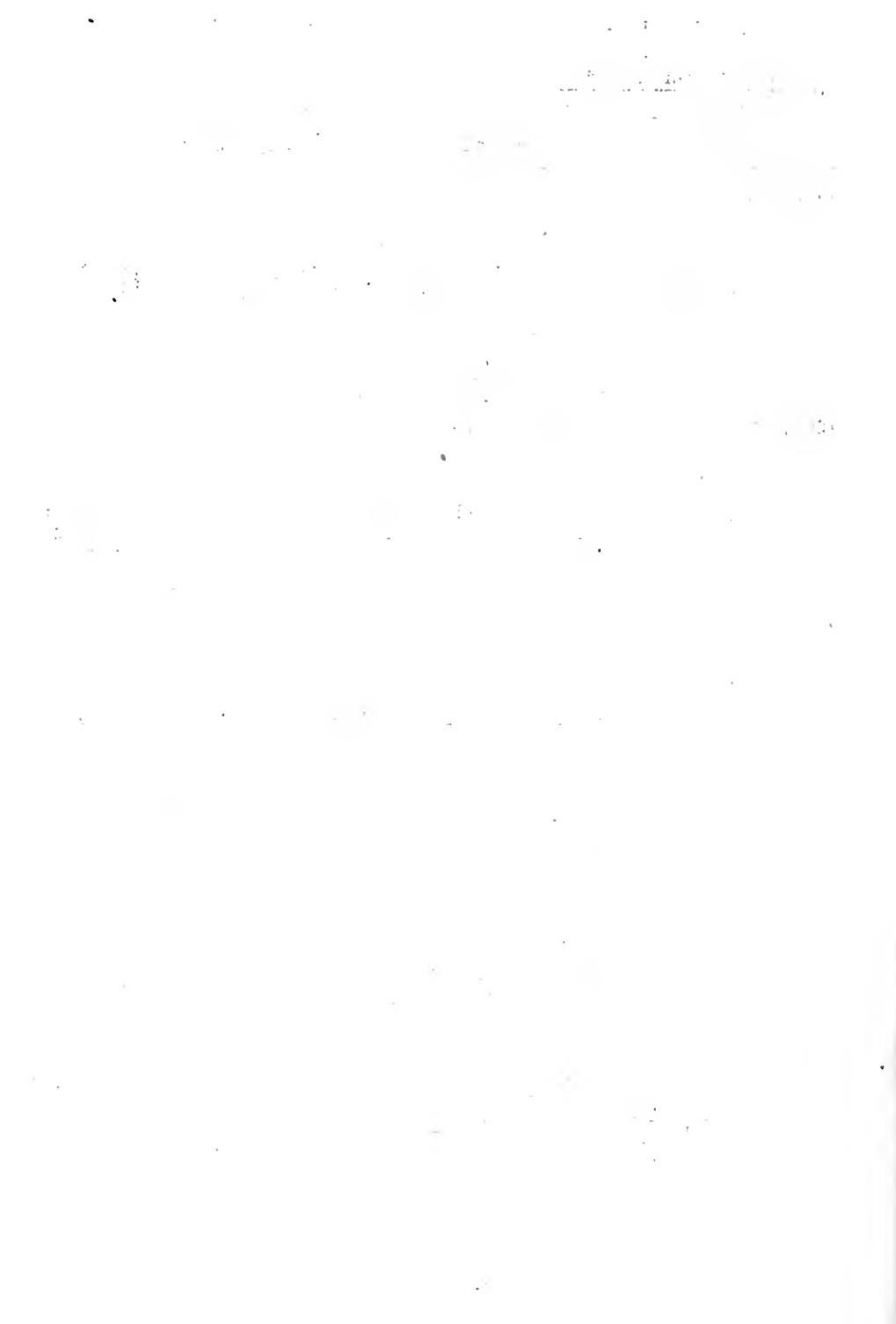
(202) HOMER HOYT (b. 1896)

Hoyt is an economist who specializes in the analysis of urban areas and functions.

- (a) Hoyt, The Structure and Growth of Residential Neighborhoods in American Cities. Washington, D.C.: Federal Housing Administration, 1939.
Hoyt suggests that uses originating near the city center tend to migrate from the center along established lines of transportation.

(203) HENRY VAUGHN LANCHESTER (1863-1954)

Lanchester was an English architect and town planner, advisor to the government on town planning in the colonies, including the making of master plans for six Indian cities during the 1910's and 20's. Later he was active on various town planning and housing committees and was lecturer in civic design at University College.



(a) Lanchester, "Cause and Effect in the Modern City," Transactions of the Town Planning Conference of the R.I.B.A. London, 1910. 232-6 pp.
Brief, not complete explanation of his sectored diagram.

(b) ----, "Plan Rationnel de Ville," Premier Congres International, Union de Villes et Communes Belges. Bruselles: Unions International des Villes, 1913. pp. 167-8.

(c) ----, The Art of Town Planning. London: Chapman & Hall Ltd. 1925. 213 pp. Plans.

(204) ADOLF RADING (b. 1889)

Rading was active in the rationalist architectural movement in Germany and contributed a design to the Werkbund Exhibition in Stuttgart in 1927.

(a) ----, Platz, Baukunst der Neuesten Zeit. 1927.
Here he has a diagram showing the sectored city.

(b) Purdom. The Building of Satellite Towns (22). p. 12.

(c) Vollmer, Hans. Allgemeines Lexikon der Bildenden Kuenstler, Thieme & Becker. Leipzig: E.A. Seeman, 1907-1950.
See Vol. 27, p. 549.

(205) MARCELLO, MILTON AND MAURIZIO ROBERTO

The brothers are Brazilian architects active in the modern movement.

(a) Roberto, "An Alternative Plan for the New Capital City of Brazil," Economics, Housing and Planning Abstracts, 6 (Aug., 1958), pp. 58-82. Illus.

(206) SPENCER EDWARD SANDERS

(a) Sanders, and A.J. Rabuck. New City Patterns. New York: Reinhold, 1916. 197 p. Illus.
Carefully developed scheme for a pure sectored city.

(207) PAUL WOLF (b. 1879)

Wolf is a prominent German architect and town planner who has designed many public buildings and housing projects. He was in charge of regional planning in Berlin (1914-1922).

(a) Wolf, Städtebau, Das Formproblem der Stadt in Vergangenheit und Zukunft. Leipzig: Klinkhardt & Biermann, 1919. 224 pp.
Illus. and plans.

(b) ----, Wohnung und Siedlung. Berlin: Wasmuth, 1926

(c) Wasmuth's Lexikon der Baukunst (30)

III. RIBBON IDEAL CITIES

Many of the ideal cities of the ribbon form are more commonly described as lineal, but there are others which make various other internal arrangements of their functions. Obviously the main characteristic of this form is that it may expand in two directions.

A. Lineal Ribbon Cities

In these cities the road is taken as the main focus and all other functions are closely related to it in a single line.

and the corresponding \hat{H}_0 and \hat{H}_1 are given by (20) and (21).
The corresponding \hat{H}_0 and \hat{H}_1 are given by (20) and (21).

For the case of \hat{H}_0 and \hat{H}_1 given by (20) and (21), we have
$$\hat{H}_0 = \frac{\hbar^2}{2m} \nabla^2 + V_0(x) - \frac{e^2}{4\pi\epsilon_0} \frac{1}{|x|} \quad (22)$$

where $V_0(x)$ is the potential function, and ∇^2 is the Laplacian operator.

For the case of \hat{H}_0 and \hat{H}_1 given by (20) and (21), we have
$$\hat{H}_0 = \frac{\hbar^2}{2m} \nabla^2 + V_0(x) - \frac{e^2}{4\pi\epsilon_0} \frac{1}{|x|} \quad (23)$$

where $V_0(x)$ is the potential function, and ∇^2 is the Laplacian operator.

For the case of \hat{H}_0 and \hat{H}_1 given by (20) and (21), we have
$$\hat{H}_0 = \frac{\hbar^2}{2m} \nabla^2 + V_0(x) - \frac{e^2}{4\pi\epsilon_0} \frac{1}{|x|} \quad (24)$$

where $V_0(x)$ is the potential function, and ∇^2 is the Laplacian operator.

For the case of \hat{H}_0 and \hat{H}_1 given by (20) and (21), we have
$$\hat{H}_0 = \frac{\hbar^2}{2m} \nabla^2 + V_0(x) - \frac{e^2}{4\pi\epsilon_0} \frac{1}{|x|} \quad (25)$$

where $V_0(x)$ is the potential function, and ∇^2 is the Laplacian operator.

For the case of \hat{H}_0 and \hat{H}_1 given by (20) and (21), we have
$$\hat{H}_0 = \frac{\hbar^2}{2m} \nabla^2 + V_0(x) - \frac{e^2}{4\pi\epsilon_0} \frac{1}{|x|} \quad (26)$$

where $V_0(x)$ is the potential function, and ∇^2 is the Laplacian operator.

(208) EDGAR CHAMBLESS

(a) Chambliss, Roadtown. New York: Roadtown Press, 1910. 172 pp.
Here the city is designed as a single continuous building following the transportation facilities throughout the countryside. Noiseless rapid transportation is in the cellar, living and commercial activities on the roof. Industry is performed in the houses.

(209) STANLEY FREESE

(a) Freese, The Ten Year Plan. London: Cecil Palmer, 1932.
A plan for a new linear town to replace London.

(b) Purdom, The Building of Satellite Towns (22), p. 485

(210) MILO MILTON HASTINGS (b. 1884)

American writer on agriculture, especially poultry.

(a) Hastings, The Continuous House. Sunset, 1914.

(b) ——, "The Continuous House," Journal of the A.I.A., 6 (June, 1919), pp. 259-66.

(211) ROBERT RUSS KERN

(a) Kern, and Charles Geschickter. "The New Town," Journal of the A.I.A., 8 (Nov., 1920), Supplement pp. 1-8. Diagram.

(b) ——, The Supercity, a Planned Physical Equipment for City Life. Washington, D.C.; 1924. 349 p. Illus.

(212) LE CORBUSIER

See plan for Algeria in Précision sur un Etat présent de l'Architecture (192-c) and Foisinger Vol. 2 (192-1)

(213) ARTURO SORIA Y MATA (1844-1920)

Soria y Mata was a Spanish engineer, industrialist and writer, owner of a street car line and founder of the corporation Ciudad Lineal which built a suburb of Madrid following his ideal plans. He was the first to popularize the lineal city concept and was very active in promoting it internationally.

(a) Soria y Mata, La Ciudad Lineal. Madrid, 1894.

(b) ——, "La Ciudad Lineal," Revista de Urbanizacion, vol. 25.

(c) ——, Nueva arquitectura de los ciudades. Madrid; 1914.

(d) ——, Les Problèmes sociaux et le Cité lineaire, trans., Albert Simi, Madrid, 1919.
Articles written 1883-92 and reprinted by H.G. Castello for the Project de Cite Lineaire Bleue.

(e) Collins, "Ciudad Lineal of Madrid," Journal of the Society of Architectural Historians, 18 (May, 1959), pp. 38-53. Illus.

(f) Encyclopédia Universal Illustrada. Madrid, 1927.
See Vol. 57, pp. 549-50 for biography.

(g) Gallion, The Urban Pattern (9). p. 375.

(h) Gutkind, Edwin A. Revolution of Environment (219), vol. 2, pp. 294-6.

- (i) Tunnard, City of Man (29), pp. 64-6 for biography and plan.
- (j) Wood, Edith Elmer. "The Spanish Linear City," Journal of the A.I.A., 9 (May 1921), pp. 160-74.
Contains discussion of the theoretical city, the actual suburb, with bibliographical references.

B. Parallel Ribbon Cities

In these cities the functions are separated and occur in parallel bands, thus the city is able to expand in two directions and maintain the same relationships between functions.

(214) TONY GARNIER (1869-1948)

Garnier was a French architect whose plan for an ideal "Cite Industrielle", separated the major functions into residential and industrial uses and allowed for growth of both functions as needed. He designed all aspects of the city including all the major types of structures.

- (a) Garnier, Une Cite Industrielle, etude pour la construction des villes, Paris: A. Vincent, 1918. 2 vols. 2d Edition. Paris: C. Massin, 1939.
The scheme was exhibited in 1901.
- (b) ——, Les Grands Travaux de la Ville de Lyons, etudes, projets et travaux executees. Paris: C. Massin, 1923. 100 pp.
- (c) "Tribute to the Greatest of Town Planners," Architectural Review, 93 (April 1943).
- (d) Badovici, Jean. L'Oeuvre de Tony Garnier. Paris: Editions Albert Morance, 1932, 1948.
Good copy of the plan of the city showing details.
- (e) Gallion, Urban Pattern (9) pp. 384-6.
- (f) Giedion, Space, Time and Architecture (10), pp. 689-694.
- (g) Korn, History Builds a Town (13), p. 386.
- (h) Purdom, The Building of Satellite Towns (22), p. 13.
- (i) Veronesi, Giulia. Tony Garnier. Milan: Il Balcone, 1948. 147 pp.
Brief biography, also illustrations and bibliography.
- (j) Zevi, Storisi dell'architettura moderna (31). pp. 102-1, 189-90.

(215) M. GINSBURG

Ginsburg was an architect and city planner who worked in Russia during the 1920's and 1930's. He was active in the constructivist and rationalist movement and a founder of the S.A.S.S. group roughly translated: Society of Architects of the Constructivist, Socialists. He designed many public buildings and was planner for the city of Sebastopol.

- (a) Ginsburg, "Sotsialisticheskaya Rekonstruktsiya Sushchestvuiuschchikh Gorodov," (Socialist Reconstruction of Existing Cities), Revoliutsija i Kultura, 1 (1930); pp. 50-1.
This entire issue is devoted to the discussion of the value of the "utopian" theories to Soviet city planning.
- (b) Blumenfeld, Hans. "Regional and City Planning in the Soviet Union," Task Magazine (New York), no. 3 (1942).

Local Government Finance Bill: Definition
of the term "municipality"

- (c) Lubetkin, Berthold. "Town and Landscape Planning in Soviet Russia," Architecture Association Journal, 1933.
- (1) Journal of the Town Planning Institute, 9 (Feb., 1933), pp. 69-75.
- (d) Parkins, Maurice Frank. City Planning in Soviet Russia, with an Interpretive Bibliography. Chicago: Chicago University Press, [1953]. 257 pp.
Brief mention of his architectural contributions.
- (e) Zevi, Storia dell'architettura moderna (31).

(216) ALEXANDER KLEIN (b. 1879)

Klein is an architect and town planner who worked in Russia and more recently has been active as a town planning consultant in Isreal. He is also professor and director of the Research Institute for Town Planning, Isreal Institute of Technology, Technion, Haifa.

- (a) Klein, "Man and Town." Technion Yearbook. New York: American Technion Society, 6 (Sept. 1947).
Contains Klein's proposal for a New Town, in which he uses a generally parallel form.

(217) N.A. MILIUTIN

Miliutin is a Russian town planner and professor. During the first five-year plan he designed a perfect parallel ribbon city for Stalingrad, and later for Magnitogorsk (which later was changed by May). The city was composed of parallel lines, with railway, industrial, green or open agricultural zones.

- (a) Miliutin, Stozgorod. Moscow; 1930.
- (b) Blumenfeld, Hans. "Regional and City Planning in the Soviet Union," Task Magazine, no. 3 (1942).
- (c) Gallion, The Urban Pattern (9), p. 383.
- (d) Gutkind, Creative Demobilisation (219-a), pp. 290-301.
- (e) Kampffmeyer, Hans. "Socialist Towns by N.A. Miliutin," Housing and Building Wohnen und bauen. Habitation et Construction (Habitation et Urbanisme). Stuttgart: International Federation for Housing and Town Planning, Jan., 1932. Vol. 4.
- (f) Lubetkin, Bertold. "Recent Developments of Town Planning in the U.S.S.R.," Architectural Review, 71 (May, 1932), pp. 209-14.
- (g) Parkins, City Planning in Soviet Russia (215-d), pp. 20-6.
- (h) Sharp, Thomas. Town Planning. Harmondsworth, Middlesex: Penguin Books Ltd., 1940. 152 pp. Illus. (See pp. 60-2).

C. Sectored Ribbon Cities

The sectored ribbon form came about in an effort to condense the dimensions of the city while maintaining the advantage of growth which the ribbon form provides. In some schemes a center is developed.

LETTERS TO THE EDITOR

NOTES ON POLYMER LETTERS

(5)

(6)

(218) ASCORAL

The Assembly of Constructors for an Architectural Renovation are a French sub-group of the CIAM (Congres Internationaux d'Architecture Moderne). Le Corbusier has been very active with this group.

See Le Corbusier, et al. Les Trois Etablissements Humains (192-h)

(219) ERWIN ANTON GUTKIND (b. 1886)

Gutkind is an architect town planner recently at the University of Pennsylvania working on a history of city planning.

- (a) Gutkind, Creative Demobilization. London: Kegan Paul, Trench, Trubner and Co. Ltd., 1943. Vol. 1 "Principles of National Planning"; Vol. 2, "Case studies in National Planning". See pp. 260-90, for his description of merging of the "linear" and "concentric" cities.
- (b) ——, Revolution of Environment. London: Kegan Paul, Trench, Trubner and Co. Ltd., 1946. Part I includes his ideal solution. Part two discusses examples of planning in Paraguay, China and Russia. Excellent bibliography.
- (c) ——, The Expanding Environment: the End of Cities and the Rise of Communities. London: Freedom Press, 1953.
- (d) ——, Community and Environment: a Discourse on Social Ecology. London: Watts, 1953, 1954. 81 p.

(220) LUDWIG HILBERSHEIMER (HILBERSEIMER)

Hilbersheimer was active in the German movement for modern architecture and contributed to the Werkbund Exhibition in Stuttgart in 1927. Later he came to the United States and has been a professor at Illinois Institute of Technology.

- (a) Hilbersheimer, The New City. Chicago: Paul Theobald and Co., 1944. 192 pp. Illus. Contains text and diagrams of his proposals.
- (b) ——, The New Regional Pattern. Chicago: Paul Theobald and Co., 1949. 197 pp. Illus. Contains fuller development of his scheme.
- (c) ——, The Nature of Cities. Chicago: Paul Theobald, and Co., 1955. 286 pp. Illus. Contains additional description of his ideas and historical material.

(221) MAYER HILLMAN

- (a) Hillman, "Project for a Linear New Town" Ekistics, Housing and Planning Abstracts, 4 (Nov., 1957), pp. 83-86. Originally published in The Architect's Journal, April 4, 1957, and Community Planning Review, Sept., 1957, pp. 136-40.

(222) MARS

The Modern Architecture Research Society was founded in 1937 in England by a group of architects of the modern movement who wished to present a scheme for the rebuilding and replanning of London.

- (a) MARS, "An exposition of the MARS work," Architectural Review, 83 (March, 1938), pp. 109-116.



(b) MARS, "A Master Plan for London," Architectural Review, 91 (June, 1942), pp. 113-50.
 This is a detailed analysis and presentation of the overall concept of a hierarchy of neighborhood cells combined in linear form. The article also includes detailed plans for small areas.

(c) Korn, History Builds the Town (13).
 Onetime chairman of the MARS group describes briefly its proposals.

(d) ——, and Brian Hudsens. "Arthur Korn, 1891 to Present," Architecture Association Journal, 73 (Dec., 1957), pp. 116, 152-4.

(223) HANS BERNHARD REICHOFF (b. 1899)

(a) Reichow, Hans Bernhard. Organische Stadtkunst, von der Grossstadt zur Stadtlandschaft. Braunschweig: G. Westermann, 1948. 212 p. Illus.
 Contains a full development of his ideas in schematic and project form. (See p. 77)

(224) JOSE LUIS SERT (b. 1902)

Sert was born in Barcelona, and as a young man led the modern design group, active particularly in housing. During 1930 he worked for Le Corbusier and continued his activity in the CIAM group. At the time of the Spanish Civil War he came to the United States and started private practice. In the 1950's he was consultant for Bogota and for the Housing Division of United Nations. In 1953 he became Dean of the Harvard Graduate School of Design.

(a) Sert, Can Our Cities Survive? Cambridge, Mass.: Harvard University Press, 1944. 259 pp. Illus.
 Mainly a statement of problems, with the neighborhood unit proposed as one part of the solution.

(b) ——, "The Human Scale in City Planning," The New Architecture and City Planning, ed. Paul Zucker. New York: Philosophical Library, 1944. 694 pp. (See pp. 392-413)

(c) ——, and Paul Wiener. "Brazil Builds a New City," Progressive Architecture, 27 (Sept., 1946), pp. 52-74.

(d) ——, and Paul Wiener. "Urbanisme en Amerique du Sud," L'Architecture d'Aujourd'hui, No. 33 (May, 1951).
 Four pilot plans for South American cities.

(e) ——, and J. Tyrwhitt, Ernesto N. Rogers. The Heart of the City, Towards the Humanisation of Urban Life. London: Lund Humphries, 1952. 185 pp. Illus. (Series: CIAM 8).

(f) ——, and Paul Wiener. "New Towns Integrate Recreation," Architectural Record, 115 (Jan., 1954)
 Description of plans for Latin American Cities.

(g) ——, "The Architect and the City," Architectural Forum, 102 (April, 1955).
 Design for pedestrian scale in city centers.

IV. AFOCAL CITIES

Afocal cities have no absolute geometric pattern in the arrangement of their functions. They have in common the assumption of great use of modern methods of transportation, communications and technology.

(225) BUCKMINSTER FULLER (b. 1895)

Fuller is an American engineer and innovator. He has not presented any exact plan for his city or region, but his interest in mobility and flexibility have important implications for future cities.

- (a) Fuller, "Universal Architecture," T-Square (Philadelphia), 2 (Feb., 1932), pp. 22-5, 34-41. Illus.
See p. 40 for the relation between houses.
- (b) Fuller Research Foundation. Dymaxion Index. Bibliography and Published Items Regarding Dymaxion. Forest Hills, N.Y., 1953.
- (c) Goodman, Paul, and Percival Goodman. Communitas. Means of Livelihood and Ways of Life. Chicago: Chicago University Press, 1947. 150 pp. (See pp. 39-40).
- (d) McHale, John. "Buckminster Fuller," Architectural Review, 120 (July, 1956), pp. 18-20.
- (e) Mumford, Lewis. City Development, Studies in Disintegration and Renewal. New York: Harcourt, Brace and Co., 1945. 248 pp.
Mumford objects to the idea of a movable single family house. (See pp. 61-83).

(226) PETER SMITHSON

Smithson, Alison and Peter. "The Cluster City," Architectural Review, 122 (November, 1957), p. 333.
Attempt to develop a modern structure comparable to the complexities of the modern city.

(227) FRANK LLOYD WRIGHT (1869-1959)

Following in the tradition of American utopian thinkers, Wright does not limit himself to the physical conditions of his ideal city, but suggests the political and economic conditions which should exist there as well. His physical proposals should be given careful consideration as his is the only fully developed scheme of the afocal type. Each dwelling has at least an acre of land and groups of similar types are arranged at varying distances from industry, market and cultural activities; yet all are made accessible by fine highways and air facilities.

- (a) Wright, The Disappearing City. New York: William Farquhar Payson, 1932. 90 pp. Illus.
A preliminary statement of the Broadacre City concept.
- (b) ——. "America Tomorrow," American Architect and Architecture, 141 (May, 1932), pp. 15-17, 76.
A statement of the principles of Broadacre City.
- (c) ——. "Broadacre City, a New Community Plan," Architectural Record, 77 (April, 1935)
- (d) ——. When Democracy Builds. Chicago: Chicago University Press, 1945. 140 pp. Illus.
Expansion of the material in Disappearing City.

- (e) Wright, The Living City; When Democracy Builds. New York: Horizon Press, 1933.
Expansion of (d), including his "Usonian" ideas, plans of individual elements of the city, and a colored plan of "the city."
- (f) —, and Brownell Baker. Architecture and Modern Life. New York: Harper and Brothers, 1937. 339 pp.
A dialogue concerning Broadacre City (See pp. 273-337).
- (g) Stillman, Seymour. "Comparing Wright and Le Corbusier," Journal of the AIA, 9-10 (April-May, 1948)

V. IDEAL ARRANGEMENTS OF CITIES IN A REGION

The ideal cities in this section all prescribe some type of definite arrangement of urban versus non-urban land within a region. There appear to be two basic types: (1) a dominant central city surrounded by others which are less important and (2) a scheme in which all cities are of equal importance. Within each of these types there can be various arrangements of urban areas.

A. Dominant Satellite Arrangements

Certainly the most influential expression of this arrangement was described and diagrammed by Howard. Indeed, this concept of arrangement, a small more or less independent community around a major city, has been the basis for most urban planning and most national planning legislation since Howard's time.

(228) SIR LESLIE PATRICK ABERCROMBIE (1879-1957)

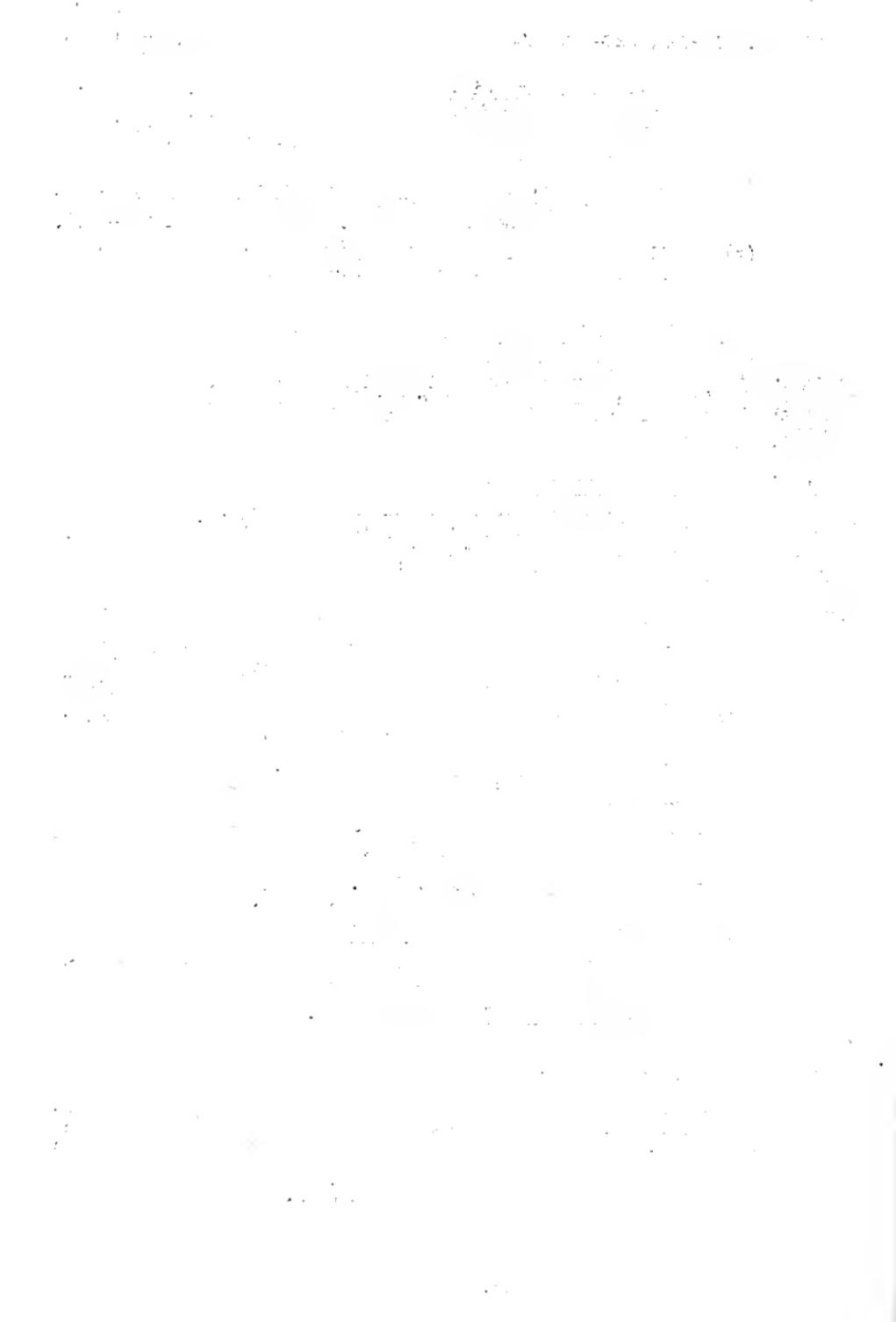
From the time he won first prize for the Dublin master plan in 1913, Abercrombie was one of the most active and respected town planners in England. He was a professor from 1915 to 1946 and chief planner for at least 19 major town or regional plans, including the London and Greater London, two of the most important physical schemes of the 1940's and 50's.

- (a) Abercrombie, Town and Country Planning. New York: Henry Holt, and London: Thornton Butterworth Ltd., 1938. 255 pp. Illus.
- (b) —, and Forshaw. County of London Plan. London: Macmillan and Co., 1943. 183 pp. Plans.
- (c) —. Greater London Plan, 1944. London: His Majesty's Stationery Office, 1945. 220 pp. Plans.
- (d) Ashworth, Modern British Town Planning (2).
- (e) Holford, William. "Leslie P. Abercrombie, 1879-1957," Town Planning Review, 28 (July, 1957), pp. 81-84.
- (f) Kimball, Manual of Information (12).

(229) HOWARD (See no. 135)

(230) BENTON MACKAYE (1879-1951)

MacKaye's work in regional planning began when he was research forester, U.S. Forest Service. He has continued throughout his life to be active in natural resources conservation, for economic and recreation purposes. He was planning consultant for many government agencies, including the T.V.A., where he was concerned with the effectuation of the regional plan.



- (a) MacKaye, "Regional Planning," Survey Graphic, (May, 1925)
Mumford was editor of this collection of articles by MacKaye, Stein, A. King, S. Chase, et al.
- (b) ——, Report for Governor's Committee on the Needs and Uses of Open Spaces. State of Mass., 1927.
Plan to establish a system of "levees" throughout the state.
- (c) ——, The New Exploration. New York: Harcourt, Brace and Co., 1928. 235 pp. Illus. and Map.
For his description of the groupings of villages around a main city, see p. 162 and diagram.
- (d) ——, and Lewis Mumford. "Regional Planning," Encyclopedia Britannica, 14th. ed.
- (e) ——, Roundtable on Regionalism. University of Virginia, Charlottesville: Institute of Public Affairs, July 6-11, 1931.
- (f) ——, and Lewis Mumford. "Townless Highways for the Motorist and a Proposal for the Motor Age," Harper's Magazine, 163 (Aug., 1931), pp. 347-56.
- (g) Mumford, The Culture of Cities (20), see section on regionalism.

(231) ERNST MAY (b. 1886)

May was city architect of Frankfurt during the 1920's and built one of the most famous rationalist housing developments in nearby Seimenstadt. During the 1930's he worked as architect and city planner in Russia where he is credited with introducing the idea of satellite new towns. During World War II he was active in planning in East Africa, and recently has returned to Hamburg as Professor of City Planning.

- (a) May, "Villes Nouvelles en U.R.S.S.," La Cité, 9 (July, 1931), pp. 229-91.
- (b) ——, "U'rbanism en U.R.S.S.," La Cité, 10 (Jan., 1932), pp. 65-78.
- (c) Korn, History Builds a Town (13), p. 97.
- (d) Malcher, Martin. "Town Development in Soviet Russia." (215-d).
- (f) Zevi, Storia dell'architettura moderna. (31), pp. 164-73.

(232) GROPIUS (See no. 166)

(233) FREDERIC JAMES OSBORN (b. 1885)

Osborn has been active in the Garden City Movement since its beginning. Along with Howard and others he founded the New Towns Group in 1918 which bought the land and built Welwyn, and from 1919-36 he was manager of the Corporation of Welwyn. In 1946 he was a member of the New Towns Committee, active in promoting national legislation for New Towns.

- (a) Osborn, New Towns after the War. London: Dent, 1918, 1942.
- (b) ——, "Planning and the Countryside," Rebuilding Britain, Series No. 8. 40 pp.
- (c) ——, "The Land and Planning," Rebuilding Britain, Series No. 7. 56 pp.

- (d) ---- "The Garden City Movement, Reaffirmation of the Validity of Howard's Idea," Landscape Architect, 36 (Jan., 1946), pp. 43-51.
- (e) ----, Green-Belt Cities, the British Contribution. London: Faber and Faber, Ltd., 1946. 191 p. Illus and plans. Here Osborn describes the arrangement of satellite towns.
- (f) Ashworth, Modern British Town Planning (2)

(234) UNWIN (See no. 182)

(235) ROBERT HAFVEY WHITTEN (1873-1936)

Whitten was an American planning consultant and specialist in the financial and legal aspects of land development. During the 1920's he made master and zoning plans for many American cities and during the 1930's was consultant to the National Resources Planning Board, and the New York State Planning Board.

- (a) Whitten, Regional Zoning. [Cleveland], 1923. 30 pp.
- (b) Purdom, The Building of Satellite Towns (22). For diagram, see p. 459.

B. Dominant - Sectored Arrangements

The idea for a dominant-sectored, or star arrangement, has developed from a rationalization of the patterns already developing in metropolitan areas. Urbanization has tended to project outward along main transportation routes, leaving, for a time, relatively less developed area between radiating lines. Perhaps the most important crystallization of the positive aspects of this plan is the Copenhagen Regional Plan, known as the "finger plan".

(236) BLUMENFELD (See no. 199)

(237) ARTHUR COLEMAN COMEY (1886-1955)

Comey started his work as a landscape architect in park planning and supervising. He then became active in city planning working for public agencies. Later he was a professor at Harvard University, and consultant to the T.V.A. He was a member of the Urbanism Committee of the National Resources Planning Board and consultant to various state and regional planning boards.

- (a) Comey, Regional Planning Theory; a reply to the British Chailance. Augusta, Me.: C.E. Nash and Son., 1923. 18 pp.
- (b) ----, and Max S. Wehrly. "Planned Communities," Urban Planning and Land Policies, vol. 2 of the supplementary report of the Urbanism Committee to the National Resources Committee. Washington, D.C.: U.S. Government Printing Office, 1939. pp. 3-161.

(238) COPENHAGEN REGIONAL PLAN

In 1948 the preliminary regional plan was published, called the "Finger Plan", in which urbanization is confined to the catchment areas of existing and proposed electrified suburban railways radiating from the town center like the fingers of a hand.

- (a) Rasmussen, Steen Eiler (Chairman). The Copenhagen Regional Plan. A Summary of the Preliminary Proposal, 1948-9. Copenhagen: Regional Planning Office, 1949.
- (b) ----, Greater Copenhagen Planning. Status. Copenhagen: Ejnar Munksgaard, 1952. (Copenhagen Regional Planning Committee) 76 pp. English summary, pp. 65-74.

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29. How many hours did you sleep last Friday?

(G. 11-12)

23

(c) Bang, Jorgen. "Report for Denmark. The City and its surroundings," International Congress for Housing and Town Planning, Vienna, 1956. 412 p.
For a description of the plan see pp. 73-4.

(239) DETROIT REGIONAL PLAN

The Detroit Metropolitan Area Regional Planning Commission made studies of alternative arrangements of possible future development of the metropolitan region in the years 1953-4. The alternative chosen was the dominant sectorized arrangement.

- (a) Detroit Metropolitan Area Regional Planning Commission, Annual Report 1954. Detroit: Regional Planning Comm., 1954.
- (b) ----. Satellite Dispersal Study. Detroit: Regional Planning Commission, 1954.
- (c) ----. Land Use Plan for the Detroit Region. Detroit: Regional Planning Commission, Aug., 1957.

(240) AUGUST LOESCH (1906-1949)

Loesch was a German economic geographer, who, following in the tradition of Crystaller, studied the economic forces causing the location of cities in a region.

- (a) Loesch, Die Raumliche Ordnung der Wirtschaft. Jena, 1940.
Translated as The Economics of Location, by William H. Woglom, New Haven: Yale University Press, 1954. 519 pp. Diagrams.

C. Equal-Clustered Arrangements.

In this scheme cities remain individual units, separated by green areas of recreational or agricultural land; yet the group of cities are well united by transportation routes and usually form complementary functions.

(241) MACKAYE (See no. 230)

(242) NATIONAL PLAN OF THE NETHERLANDS

- (a) Netherlands Government Information Service. Physical Planning in the Netherlands. The Hague, 1950. 26 pp.
- (b) Glikson, Artur. Regional Planning and Development. Leiden: A.W. Sijthoff, 1955. 120 pp. Illus, maps. Bibliography, p. 118.
Six Lectures delivered at the Institute of Social Studies, The Hague, 1953.

(243) ELIEL SAARINEN (1873-1950)

Saarinen was well established as an architect in Finland, but came to the United States in the 1920's, where he continued his work in architecture, city planning and education.

- (a) Saarinen, "The Art of Building Cities," The American Architect, 147 (Oct. 1935), pp. 12-20. Photos and plans.
Here he presents his idea for re-constructing present day cities in groups of small town units.
- (b) ----, The City, its Growth, its Decay, its Future. New York: Reinhold Publishing Co., 1943, 1945. 380 pp. Illus, and plans.

1. *Leucosia* sp. (Diptera: Syrphidae) - 1♂

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38. *Leucosia* sp. (Diptera: Syrphidae) - 1♂

(c) Reid, Kenneth. "Eliel Saarinen, Master of Design," Pencil Points, 17 (Sept., 1936), pp. 465-503.
A Survey of his work, including his ideal plans.

(244) CLARENCE STEIN (b. 1882) See also no. 247.

Stein is an American architect and city planner. He was chairman of the Commission on Housing and Regional Planning for the State of New York, 1923-1926. He is most famous for his design (with H. Wright) of Radburn, N.J. the first fully developed scheme using open "Super-Blocks", surrounded by housing. During the 1930's he was associated as consultant with all the "Green" cities, the New Towns of the United States. In the 1940's he was consultant for Kitimat, a new town in the forests of British Columbia.

(a) Stein, "City Patterns, Past and Future," New Pencil Points, 23 (June, 1942), pp. 52-6. Diagrams.
This is the most complete statement of his ideal arrangement of towns in a region.

(b) ——, "Planning Technique and the London Plan," Architectural Review, 96 (Sept., 1944), pp. 79-80.
Recommends smaller sized communities.

(c) ——, "The City of the Future: A City of Neighborhoods," American City, 60 (Nov., 1945), pp. 123-4.
A popularized presentation of his regional concept.

(d) ——, Toward New Towns for America. Liverpool: University of Liverpool Press. 248 pp.
(1) 2nd, ed. New York: Reinhold, Publishing, Corporation, 1957. 263 pp.
His own story of the major site planning projects he designed.

(e) ——, "Communities for the Good Life," Journal of the A.I.A. 25 (July, 1956).
(1) Reprinted in Apartments and Dormitories, F.W. Dodge Corporation, 1958., pp. 38-41.

(f) "Land Planning's Man of Influence - Clarence S. Stein," House and Home, 9 (May, 1956).

(g) Kimball, Manual of Information (12).

D. Equal-Ribbon Arrangements

In this arrangement cities remain as individual units, separated by green areas of recreational or agricultural land, but the group of cities is arranged in a particular directional pattern within the region.

(245) HENRY FORD (1863-1947)

Ford, the American automobile manufacturer, engineer and politician, proposed in 1922 that a string of small towns 75 miles long be built, as part of a scheme to industrialize the Mississippi River.

(a) Ford, My Life and My Work. New York: Doubleday, Page and Co., 1922. 289 pp.
No direct reference to his ideas on regional planning, but interesting as background.



(b) "The Greatest City," Survey, 47 (Feb., 11, 1922), pp. 764-5.
A brief description of the Muscle Shoals schemes.

(c) Kimball, Manual of Information (12).

(246) HILBERSHEIMER (See no. 220)

(247) NEW YORK STATE REGIONAL PLAN, 1926

This is a plan for the redistribution of the population of New York State based on the premise that relatively isolated small centers are now technically and socially possible. (By Mackaye, H. Wright, C. Stein, Chairman)

(a) New York State Commission of Housing and Regional Planning (C. Stein, Chairman). Exhibit: Preliminary Studies of Natural Features and Economic Development of the State. (Catalogue of the Exhibition). New York, 1925. 8 pp.

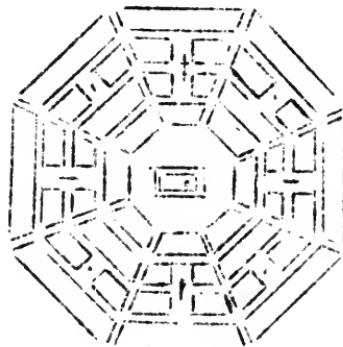
(b) ——. Report of the Commission of Housing and Regional Planning to Governor Alfred E. Smith, May 7, 1926. Albany, N.Y.: 1926. 82 p. Illus.

(c) Stein, Clarence. "A Plan for the State of New York," The International Town Planning Conference New York, 1925, pp. 282-7. Clear statement of the policies of the plan.

(d) "Summary of the New York State Plan of 1926," Journal of the Town Planning Institute of Canada, (Dec., 1925).

(e) Mackaye, The New Exploration (230-c), p. 43.

(f) Mumford, Culture of Cities (20), pp. 308-9.
Good description of the proposals, plus a diagram.



Vitruvius' Ideal City Pattern
(After Thomas Adams, p. 75)

See no. 63

$$x = 17.75 \pm 1.50 \cdot \sqrt{\frac{1}{P_1} + \frac{1}{P_2} + \frac{1}{P_3}} = 17.75 \pm 1.50 \cdot \sqrt{0.0015} = 17.75 \pm 0.225$$

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19. *Leucosia* *leucostoma* *leucostoma* *leucostoma* *leucostoma* *leucostoma* *leucostoma*

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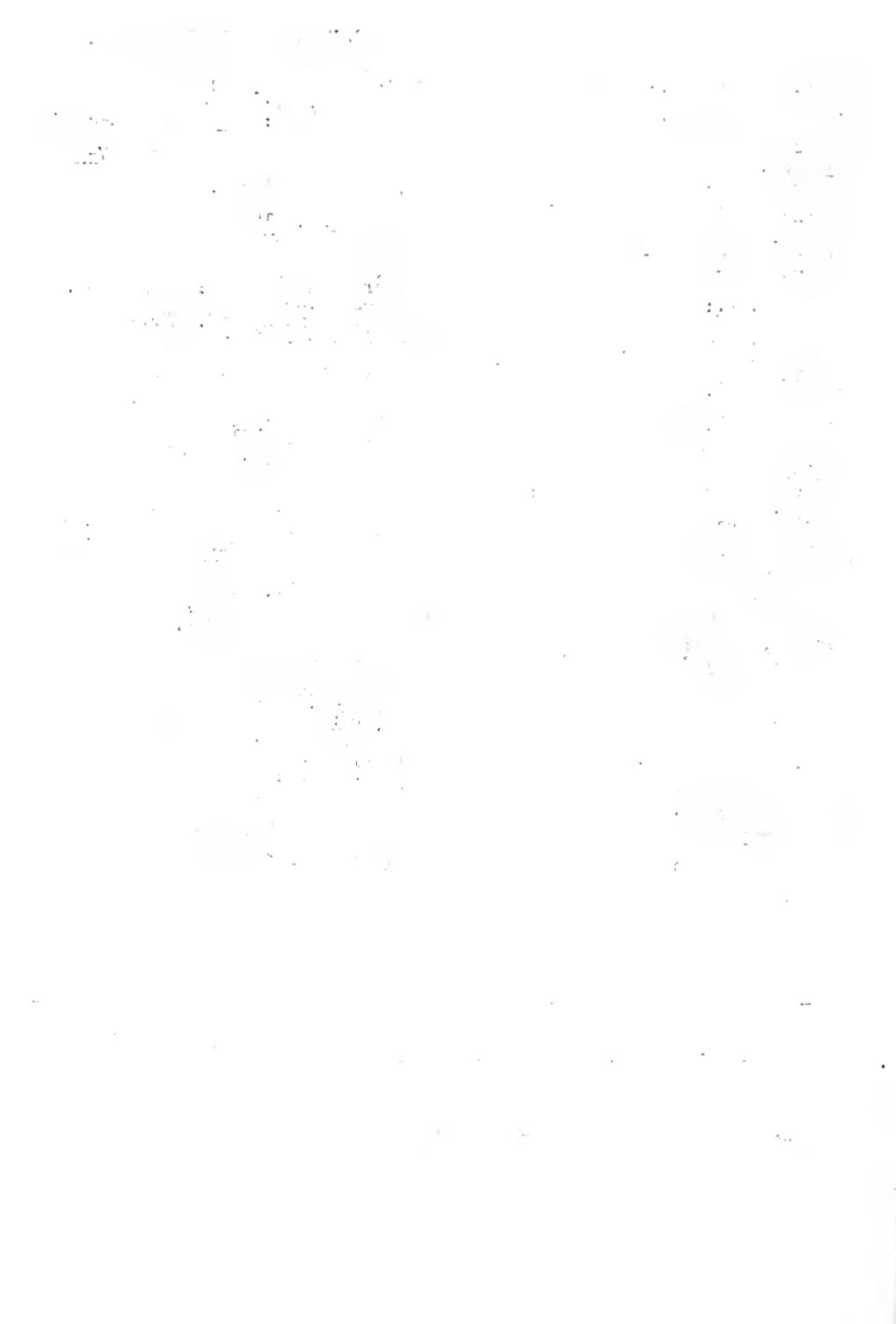
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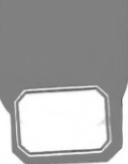
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